SEARCH REQUEST FORM

Access DB# 45244

Scientific and Technical Information Center

m28

Requester's Full Name: Natalie Davis Examiner #: 78462 Date: 6-21-01
Art Unit: 1642 Phone Number 308-6410 Serial Number: 09/719272
Mail Box and Bldg/Room Location: 8E12 CM1 9809 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: 6-8-98

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Please search LAR, antibodies to LAR, a method of quantitatively measuring LAR & its expression levels for the diagnosis of thyroid & other cancers.

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Searcher: Point of Contact: Alex Wasiewiw
Searcher Phone #: Technical Info. Specialist
Searcher Location: CM1 12C14 Tel: 308-4491
Date Searcher Picked Up: 7-12-01
Date Completed: 7-12-01
Searcher Prep & Review Time: 12
Clerical Prep Time: _____
Online Time: 83

PTO-1590 (1-2000)

Type of Search		Vendors and cost where applicable	
NA Sequence (#)		STN	21 00
AA Sequence (#)		Dialog	
Structure (#)		Questel/Orbit	
Bibliographic	✓	Dr.Link	
Litigation		Lexis/Nexis	
Fulltext		Sequence Systems	
Patent Family		WWW/Internet	
Other		Other (specify)	

DUP 25-40

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14
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23

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(FILE 'HOME' ENTERED AT 09:56:58 ON 12 JUL 2001)

FILE 'HCAPLUS' ENTERED AT 09:57:06 ON 12 JUL 2001

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L1          281 S LAR
L2       150667 S ANTIBOD?
L3            6 S L1 (L) L2
L4            8 S L1 AND L2
L5          100 S PHOSPHATASE# (L) L1
L6            4 S L5 AND L2
L7            8 S L4 OR L6
L8           39 S LEUKOCYTE (2W) ANTIGEN# RELAT?
L9            2 S L8 AND L2
L10           9 S L9 OR L7
L11         857 S LEUKOCYTE COMMON (L) ANTIGEN#
L12          89 S L11 (L) L2
L13         170 S L11 (L) RELAT?
L14          10 S L2  (L) L13
L15          33 S L11 (L) RELATED
L16           1 S L15 (L) L2
L17           9 S L16 OR L10
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L17 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:472785 HCAPLUS
TITLE: Olfactory receptor genes and pseudogenes in primates and mouse
INVENTOR(S): Rouquier, Sylvie; Giorgi, Dominique
PATENT ASSIGNEE(S): Centre National de la Recherche Scientifique-CNRS, Fr.
SOURCE: PCT Int. Appl., 482 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046262	A2	20010628	WO 2000-IB2017	20001222

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-171746 P 19991222
US 2000-747155 A 20001221

AB The present invention relates to olfactory receptor genes and pseudogenes of 10 primate species, in addn. to mouse. The invention also concerns

olfactory receptors encoded by these genes and their utilization. The sequences are deposited in GenBank under Accession Nos. AF073959-AF073989, AF127814-AF127907, and AF179716-AF179843. The polynucleotides and/or proteins may be fixed on membranes, and used for detection of aromas, quality control, sample anal., comparison or anal. of perfunes, and detection of toxic substances.

IC ICM C07K147-05
CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 6, 9, 13
IT INDEXING IN PROGRESS
IT **Antibodies**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(monoclonal; olfactory receptor genes and pseudogenes in primates and mouse)
IT Callithrix jacchus
Chimpanzee (Pan troglodytes)
DNA sequences
Danio rerio
Eulemur fulvus
Eulemur rubriventer
Evolution
Gorilla gorilla
Hylobates **lar**
Macaca sylvanus
Molecular cloning
Mouse
Mouse (Mus musculus domesticus)
Orangutan
Papio papio
Primate
Protein sequences
Saimiri boliviensis
Saimiri sciureus
(olfactory receptor genes and pseudogenes in primates and mouse)
IT **Antibodies**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(olfactory receptor genes and pseudogenes in primates and mouse)

L17 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:230493 HCAPLUS
DOCUMENT NUMBER: 135:17344
TITLE: Within the hemopoietic system, **LAR** **phosphatase** is a T cell lineage-specific adhesion receptor-like protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function
AUTHOR(S): Terszowski, Grzegorz; Jankowski, Adam; Hendriks, Wiljan J. A. J.; Rolink, Antonius G.; Kisielow, Pawel
CORPORATE SOURCE: Basel Institute for Immunology, Basel, Switz.
SOURCE: Eur. J. Immunol. (2001), 31(3), 832-840
CODEN: EJIMAF; ISSN: 0014-2980
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Expression of the receptor-type tyrosine phosphatase LAR was studied in cells of the murine hemopoietic system. The gene is expressed in all cells of the T cell lineage but not in cells of any other hemopoietic lineage and the level of expression in T cells is developmentally regulated. The CD4-8-44+ early thymic immigrants and mature (CD+8-/CD4-8+) thymocytes and T cells express low levels, whereas immature (CD4-8-44- and CD4+8+) thymocytes express high levels of LAR. Among bone marrow cells only uncommitted c-kit+B220+CD19- precursors, but not B cell lineage committed c-kit+B220+CD19+ precursors, express low levels of LAR. In contrast to the c-kit+B220+CD19- pre-BI cells from normal mice, counterparts of pre-BI cells from PAX-5-deficient mice express LAR, indicating that PAX-5-mediated commitment to the B cell lineage results in suppression of LAR. During differentiation of PAX-5-deficient pre-BI cell line into non-T cell lineages, expression of LAR is switched off, but it is up-regulated during differentiation into thymocytes. Thus, within the hemopoietic system, LAR appears to be a T cell lineage-specific receptor-type phosphatase. However, surprisingly, truncation of its phosphatase domains has no obvious effect on T cell development, repertoire selection or function.

CC 13-5 (Mammalian Biochemistry)
Section cross-reference(s): 3

ST **LAR phosphatase** T cell thymocyte hemopoietic system

IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(Ptprf; within hemopoietic system, **LAR phosphatase** is a T cell lineage-specific adhesion receptor-like protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function)

IT Bone marrow
(c-kit+B220+; within hemopoietic system, **LAR phosphatase** is a T cell lineage-specific adhesion receptor-like protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function)

IT Embryo, animal
(embryogenesis; within hemopoietic system, **LAR phosphatase** is a T cell lineage-specific adhesion receptor-like protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function)

IT **Antibodies**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(monoclonal, 2A10; within hemopoietic system, **LAR phosphatase** is a T cell lineage-specific adhesion receptor-like protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function)

IT Protein motifs
(**phosphatase** domain of **LAR phosphatase**; truncation of **phosphatase** domain of **LAR phosphatase** has no obvious effect on T cell development, repertoire selection or function)

IT Thymus gland
(thymocyte; within hemopoietic system, **LAR phosphatase** is a T cell lineage-specific adhesion receptor-like

protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function)

IT Development, mammalian postnatal
Lymph node
Mouse (Mus musculus)
Protein sequences
Spleen
T cell (lymphocyte)
Thymus gland
cDNA sequences
(within hemopoietic system, **LAR phosphatase** is a T cell lineage-specific adhesion receptor-like protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function)

IT 343290-23-3
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; within hemopoietic system, **LAR phosphatase** is a T cell lineage-specific adhesion receptor-like protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function)

IT 309706-39-6, GenBank AF300943
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(nucleotide sequence; within hemopoietic system, **LAR phosphatase** is a T cell lineage-specific adhesion receptor-like protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function)

IT 300857-98-1, Protein tyrosine **phosphatase LAR**
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(within hemopoietic system, **LAR phosphatase** is a T cell lineage-specific adhesion receptor-like protein whose **phosphatase** activity appears dispensable for T cell development, repertoire selection and function)

REFERENCE COUNT: 31
REFERENCE(S):
(1) Cunningham, B; Science 1987, V236, P799 HCAPLUS
(2) Krueger, N; EMBO J 1990, V9, P3241 HCAPLUS
(3) Kulas, D; J Biol Chem 1996, V271, P748 HCAPLUS
(4) Kypta, R; J Cell Biol 1996, V134, P1519 HCAPLUS
(5) Li, L; Semin Immunol 2000, V12, P75 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:741952 HCAPLUS
DOCUMENT NUMBER: 133:325605
TITLE: Products and methods for treating PTP **LAR** -related diseases such as metastasis
INVENTOR(S): Ullrich, Axel; Muller, Thomas
PATENT ASSIGNEE(S): Max-Planck-Institut, Germany
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000061180	A2	20001019	WO 2000-US9274	20000406

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-128673 P 19990409

AB The present invention relates to methods and products useful for the treatment of various epithelial cell migration diseases and disorders, and to methods useful for the identification of various products useful for the treatment of these diseases and disorders. In particular, methods for treatment using PTP LAR are described, as are methods for identifying compds. to modulate PTP LAR activity.

IC ICM A61K038-46
ICS A61K048-00; C12Q001-68; G01N033-573; G01N033-50; A61K031-404; A61K031-517; A61K031-498; A61K031-00; A61P035-00; A61P017-02; C12N015-55; C12N009-16

CC 63-3 (Pharmaceuticals)
Section cross-reference(s): 1, 3, 7, 9

ST protein tyrosine **phosphatase LAR** antitumor sequence

IT **Antibodies**
RL: ARG (Analytical reagent use); BPR (Biological process); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(PTP **LAR**-specific; products and methods for treating PTP **LAR**-related diseases such as metastasis)

IT Wound healing
(aberrant; products and methods for treating PTP **LAR**-related diseases such as metastasis)

IT Diagnosis
(agents; products and methods for treating PTP **LAR**-related diseases such as metastasis)

IT Cell migration
(epithelial; products and methods for treating PTP **LAR**-related diseases such as metastasis)

IT Antitumor agents
Neoplasm
(metastasis; products and methods for treating PTP **LAR**-related diseases such as metastasis)

IT Epithelium
(migration of; products and methods for treating PTP **LAR**-related diseases such as metastasis)

IT **Antibodies**
RL: ARG (Analytical reagent use); BPR (Biological process); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(monoclonal, PTP **LAR**-specific; products and methods for treating PTP **LAR**-related diseases such as metastasis)

IT Globins
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(plakoglobins; products and methods for treating PTP **LAR**

-related diseases such as metastasis)
IT Antitumor agents
Diagnosis
Hybridoma
Molecular cloning
Neoplasm
Nucleic acid hybridization
Phosphorylation, biological
cDNA sequences
(products and methods for treating PTP **LAR**-related diseases such as metastasis)
IT Probes (nucleic acid)
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(products and methods for treating PTP **LAR**-related diseases such as metastasis)
IT Cytotoxic agents
(tyrphostins; products and methods for treating PTP **LAR** -related diseases such as metastasis)
IT Catenins
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(.beta.-, phosphorylation of; products and methods for treating PTP **LAR**-related diseases such as metastasis)
IT 79747-53-8, Phosphotyrosine **phosphatase**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(products and methods for treating PTP **LAR**-related diseases such as metastasis)
IT 300857-98-1, **Leukocyte antigen-related** protein tyrosine **phosphatase**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(products and methods for treating PTP **LAR**-related diseases such as metastasis)
IT 91-19-0D, Quinoxaline, derivs. 253-82-7D, Quinazoline, derivs.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(products and methods for treating PTP **LAR**-related diseases such as metastasis)
IT 302873-01-4, 2: PN: WO0061180 FIG: 10 unclaimed DNA
RL: PRP (Properties)
(unclaimed nucleotide sequence; products and methods for treating PTP **LAR**-related diseases such as metastasis)
IT 302873-00-3
RL: PRP (Properties)
(unclaimed protein sequence; products and methods for treating PTP **LAR**-related diseases such as metastasis)

L17 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:125761 HCAPLUS
DOCUMENT NUMBER: 132:277953
TITLE: A potent neutralizing monoclonal **antibody** can discriminate amongst IFN.gamma. from various primates with greater specificity than can the human IFN.gamma. receptor complex
AUTHOR(S): Thakur, Archana B.; Landolfi, Nicholas F.
CORPORATE SOURCE: Protein Design Labs Inc., Fremont, CA, 94555, USA

SOURCE: Mol. Immunol. (2000), Volume Date 1999, 36(15-16), 1107-1115
PUBLISHER: CODEN: MOIMD5; ISSN: 0161-5890
DOCUMENT TYPE: Elsevier Science Ltd.
LANGUAGE: Journal
English

AB A monoclonal antibody (AF2) generated against recombinant human interferon.gamma. (IFN.gamma.) exhibited potent IFN.gamma. neutralizing activity and prevented human IFN.gamma. from binding to the cell surface IFN.gamma. receptor complex. The AF2 antibody also neutralized IFN.gamma. from higher primates (superfamily Hominoidea) but did not react with IFN.gamma. from rhesus or other primates in the suborder Anthropoidea. IFN.gamma. from all primates tested, however, could signal via the human IFN.gamma. receptor complex, as indicated by the ability to upregulate the level of MHC class II mol. expression on the surface of a responsive human cell line. The authors cloned and sequenced the IFN.gamma. gene from chimpanzee, gorilla, orangutan, and gibbon, and compared those with the previously reported IFN.gamma. sequences of human, rhesus, baboon and marmoset. This comparison revealed that, of the primate IFN.gamma.s that were not reactive with AF2, rhesus IFN.gamma. was most homologous to human IFN.gamma., differing at only nine amino acids and contg. a one amino acid deletion. Comparing the sequence of human IFN.gamma. with that of rhesus IFN.gamma. suggested residues of the human IFN.gamma. mol. that were involved in the formation of the epitope recognized by the AF2 antibody. Constructing human/rhesus chimeric IFN.gamma. mols., combined with site-directed mutagenesis of both human and rhesus IFN.gamma. revealed that this epitope was dependent upon two non-contiguous amino acids that are juxtaposed in the tertiary structure of IFN.gamma.. The determinant recognized by AF2 antibody resides in a portion of IFN.gamma. that is proximal to, but distinct from the surface that interacts with the IFN.gamma. receptor. Therefore, this neutralizing monoclonal antibody reacts with a conformational determinant that distinguishes primate IFN.gamma.s serol., but not functionally.

CC 15-3 (Immunochemistry)
Section cross-reference(s): 3

ST neutralizing monoclonal **antibody** discriminate interferon gamma primate human receptor; sequence interferon gamma cDNA primate

IT Conformation
(epitope; sequences of primate interferon .gamma. cDNAs and potent neutralizing monoclonal **antibody** that discriminates among interferon .gamma. from various primates with greater specificity than can human interferon .gamma. receptor complex)

IT Protein sequences
(homol.; sequences of primate interferon .gamma. cDNAs and potent neutralizing monoclonal **antibody** that discriminates among interferon .gamma. from various primates with greater specificity than can human interferon .gamma. receptor complex)

IT Gene, animal
RL: BOC (Biological occurrence); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(ifnG; sequences of primate interferon .gamma. cDNAs and potent neutralizing monoclonal **antibody** that discriminates among

interferon .gamma. from various primates with greater specificity than can human interferon .gamma. receptor complex)

IT Epitopes
(mapping; sequences of primate interferon .gamma. cDNAs and potent neutralizing monoclonal **antibody** that discriminates among interferon .gamma. from various primates with greater specificity than can human interferon .gamma. receptor complex)

IT **Antibodies**
RL: BPN (Biosynthetic preparation); BPR (Biological process); BUU (Biological use, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(monoclonal, neutralizing; sequences of primate interferon .gamma. cDNAs and potent neutralizing monoclonal **antibody** that discriminates among interferon .gamma. from various primates with greater specificity than can human interferon .gamma. receptor complex)

IT Anthropoidea
Baboon
Chimpanzee (Pan troglodytes)
Gorilla gorilla
Hominidae
Hylobates **lar**
Macaca mulatta
Marmoset
Orangutan
Primate
Protein sequences
cDNA sequences
(sequences of primate interferon .gamma. cDNAs and potent neutralizing monoclonal **antibody** that discriminates among interferon .gamma. from various primates with greater specificity than can human interferon .gamma. receptor complex)

IT Interferon receptors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(.gamma.-interferon; sequences of primate interferon .gamma. cDNAs and potent neutralizing monoclonal **antibody** that discriminates among interferon .gamma. from various primates with greater specificity than can human interferon .gamma. receptor complex)

IT Interferons
RL: BOC (Biological occurrence); BPR (Biological process); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(.gamma.; sequences of primate interferon .gamma. cDNAs and potent neutralizing monoclonal **antibody** that discriminates among interferon .gamma. from various primates with greater specificity than can human interferon .gamma. receptor complex)

IT 82115-62-6, Interferon .gamma. (human lymphocyte protein moiety reduced) 263886-87-9 263886-88-0 263886-89-1
RL: BOC (Biological occurrence); BPR (Biological process); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(amino acid sequence; sequences of primate interferon .gamma. cDNAs and potent neutralizing monoclonal **antibody** that discriminates among interferon .gamma. from various primates with greater specificity than can human interferon .gamma. receptor complex)

IT 232584-19-9, GenBank AF164786 232584-20-2, GenBank AF164787

232584-21-3, GenBank AF164788 232584-22-4, GenBank AF164789
RL: BOC (Biological occurrence); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(nucleotide sequence; sequences of primate interferon .gamma. cDNAs and
potent neutralizing monoclonal **antibody** that discriminates among interferon .gamma. from various primates with greater specificity
than can human interferon .gamma. receptor complex)
REFERENCE COUNT: 30
REFERENCE(S): (1) Akamatsu, Y; J Immunol 1993, V151, P4651 HCAPLUS
(2) Alfa, M; J Immunol 1988, V141, P2474 HCAPLUS
(3) Bach, E; Annu Rev Immunol 1997, V15, P563 HCAPLUS
(5) Berg, E; Blood 1995, V85, P31 HCAPLUS
(7) Czarniecki, C; J Immunol 1988, V140, P4217 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:53725 HCAPLUS
DOCUMENT NUMBER: 132:121466
TITLE: **Antibody** against protein tyrosine phosphatase intracellular domains
INVENTOR(S): Yamamoto, Hiroshi; Tsujikawa, Kazutake; Uchino, Yukiko
PATENT ASSIGNEE(S): Fuso Pharmaceutical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000002922	A1	20000120	WO 1999-JP3656	19990706
W: AU, CA, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9945317	A1	20000201	AU 1999-45317	19990706
EP 1097944	A1	20010509	EP 1999-928210	19990706
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.:
WO 1998-JP3120 A 19980710
JP 1998-312098 A 19980710
WO 1999-JP3656 W 19990706

AB An antibody specific to intracellular domains of at least two protein tyrosine phosphatases; a process for prepg. the same; and cells producing the above antibody. This antibody, which has specificities to intracellular domains of both of phosphatase subunits LAR and CD45, is useful in analyzing and quantitating PTPs, identifying and detecting a novel PTP, acquiring a novel phosphatase by cloning, etc., as well as developing a diagnostic method useful in insulin resistance and NIDDM, preventing, treating (curing, etc.) and diagnosing various symptoms of syndrome X based on insulin resistance, and preventing and diagnosing the onset of arteriosclerosis and heart diseases.

IC C07K016-18; C12N005-20; C12P021-08; G01N033-53; G01N033-577; C12N015-06

CC 15-3 (Immunochemistry)
Section cross-reference(s): 3
ST **antibody** antigen CD45 **LAR** tyrosine **phosphatase** ; Syndrome X NIDDM arteriosclerosis heart disease
IT Antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**LAR**; **antibody** against receptor-type protein tyrosine **phosphatase** intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT Arteriosclerosis
DNA sequences
Heart, disease
Hybridoma
Protein sequences
(**antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT Fusion proteins (chimeric proteins)
RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(**antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT **Antibodies**
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT CD45 (antigen)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT Gene, animal
Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT **Antibodies**
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monoclonal; **antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT Diabetes mellitus
(non-insulin-dependent; **antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT Disease, animal
(syndrome X; **antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome

X and heart disease)
IT 161736-53-4 252362-91-7
RL: PRP (Properties)
(amino acid sequence; **antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT 79747-53-8, Tyrosine phosphatase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT 50812-37-8P, Glutathione-S-transferase
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)
(fusion protein with **LAR** tyrosine **phosphatase** domain 2; **antibody** against receptor-type protein tyrosine **phosphatase** intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT 140801-66-7, GenBank Y00815 255814-97-2
RL: PRP (Properties)
(nucleotide sequence; **antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT 9004-10-8, Insulin, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(resistance; **antibody** against receptor-type protein tyrosine phosphatase intracellular domains for treating and diagnosing Syndrome X and heart disease)
IT 255831-99-3 255832-00-9 255832-01-0 255832-02-1 255832-03-2
256215-32-4 256215-33-5
RL: PRP (Properties)
(unclaimed protein sequence; **antibody** against protein tyrosine phosphatase intracellular domains)
IT 255724-73-3
RL: PRP (Properties)
(unclaimed sequence; **antibody** against protein tyrosine phosphatase intracellular domains)
REFERENCE COUNT: 2
REFERENCE(S): (1) Streuli, M; J Exp Med 1988, V168(5), P1553
(2) Zhang, W; Biochem J 1994, V302(1), P39 HCAPLUS

L17 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:800679 HCAPLUS
DOCUMENT NUMBER: 132:49031
TITLE: **Antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clinical use
INVENTOR(S): Yamamoto, Hiroshi; Tsujikawa, Kazutake; Uchino, Yukiko; Konishi, Noboru
PATENT ASSIGNEE(S): Fuso Pharmaceutical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 104 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964591	A1	19991216	WO 1999-JP3054	19990607
W: AU, CA, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9940603	A1	19991230	AU 1999-40603	19990607
EP 1092772	A1	20010418	EP 1999-923958	19990607
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: WO 1998-JP2542 A 19980608
WO 1999-JP3054 W 19990607

AB An antibody specific to the phosphatase subunit of human leukocyte common antigen LAR, in particular the intracellular domain of LAR phosphatase subunit, is provided. Prepn. of mouse monoclonal antibody to LAR by immunization of Balb/c mice with a fusion protein of glutathione-S-transferase and a fragment of the phosphatase subunit (residues 1291-1897), fusion of the immunized mouse spleen cells with mouse myeloma NS1 cells, followed by selection of hybridomas. Hybridoma clone YU1 producing IgG2b.kappa. type monoclonal antibody was isolated. The monoclonal antibody is not reactive to CD45. A method for quantitating and examg. LAR/LAR-derived mols. by using this antibody; and utilization of this antibody in diagnosing and treating thyroid cancer are also described.

IC C12N015-12; C12N015-62; C12N015-63; C12N005-20; C07K016-30; C12P021-08; G01N033-53; G01N033-577; A61K039-395

CC 15-3 (Immunochemistry)
Section cross-reference(s): 13

ST monoclonal **antibody** human leukocyte common antigen **LAR** ; thyroid diagnosis therapy **antibody LAR**

IT Immunoassay
(**LAR** mol. detn. by; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT Antisense DNA
Ribozymes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-thyroid cancer agent contg.; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT Hybridoma
(clone YU1; FERM BP-6343; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT cDNA sequences
(for **phosphatase** subunit of human leukocyte common antigen **LAR**)

IT Thyroid gland, neoplasm
(immunodiagnosis of; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT Diagnosis
(immunodiagnosis, of thyroid diseases; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT Thyroid gland, neoplasm
(inhibitors, DDS; monoclonal **antibody**-contg.; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT Antigens
RL: ANT (Analyte); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(leukocyte common antigen **LAR**; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT CD45 (antigen)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(monoclonal **antibody** non-reactive to; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT **Antibodies**
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monoclonal, to **LAR**; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT Probes (nucleic acid)
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(of **LAR** cDNA; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT Protein sequences
(of **phosphatase** subunit of human leukocyte common antigen **LAR**)

IT Antitumor agents
(thyroid, DDS; monoclonal **antibody**-contg.; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT 252362-91-7
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(amino acid sequence; **phosphatase** subunit; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT 9013-05-2, **Phosphatase**
RL: ANT (Analyte); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(**antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT 50812-37-8D, Glutathione-S-transferase, fusion protein with **LAR** **phosphatase** subunit
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT 252362-93-9
RL: BOC (Biological occurrence); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(nucleotide sequence; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)

IT 252647-41-9, 2: PN: WO9964591 SEQID: 3 unclaimed DNA
RL: PRP (Properties)
(unclaimed nucleotide sequence; **antibody** to **phosphatase** subunit of human leukocyte common antigen

LAR and clin. use)
IT 252647-39-5
RL: PRP (Properties)
(unclaimed protein sequence; **antibody** to **phosphatase** subunit of human leukocyte common antigen **LAR** and clin. use)
REFERENCE COUNT: 8
REFERENCE(S):
(1) Faure, P; Caner 1988, V61(9), P1852 MEDLINE
(2) Kanemitsu, O; Chijin Shokan 1994, P145
(3) Lawrence, P; J Neurochem 1995, V64(3), P1305
(4) Michel, S; EMBO J 1992, V11(3), P897
(7) Shvero, J; Cancer 1988, V62(2), P319 MEDLINE
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1990:495805 HCAPLUS
DOCUMENT NUMBER: 113:95805
TITLE: RT7-defined alloantigens in rats are part of the leukocyte common antigen family
AUTHOR(S): Kampinga, Jaap; Kroese, F. G. M.; Pol, G. H.; Opstelten, D.; Seijen, H. G.; Boot, J. H. A.; Roser, B.; Nieuwenhuis, P.; Aspinall, R.
CORPORATE SOURCE: Dep. Histol. Cell Biol., Univ. Groningen, Groningen, Neth.
SOURCE: Scand. J. Immunol. (1990), 31(6), 699-710
CODEN: SJIMAX; ISSN: 0300-9475
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Hemopoietic cells carry a variety of cell-surface mols., some of which are known to have allotypic variation. In rats, the RT7 alloantigenic system has been well documented using alloantisera. The authors have produced a mouse hybridoma cell line secreting an antibody, HIS41, which binds to leukocytes of rat strains carrying the Rt7.2 but not the Rt7.1 determinant. An IgG2b isotype switch variant (HIS41.2b) of the original HIS51 (IgG1 isotype) was also made. HIS41 showed a clear and discrete binding in immunofluorescent and histol. expts. and has already been used in several studies on hemopoietic cell turnover and differentiation employing PVG rats cogenic for RT7. In this study, the possibility was studied that RT7 gene products are members of the L-CA family. When using HIS41 for the anal. of tissue distribution and mol. wt. of RT7 gene products, a strong similarity was evident with the data reported for the L-CA detected by MRCOX-1 and MRCOX-30. These 2 MoAb have been reported to bind to all members of L-CA family. All hematopoietic cells, excluding erythrocytes and the more mature stages of erythropoiesis, stained with HIS41. The mol. wts. of HIS41 binding mols. on thymocytes and peripheral T cells were comparable to the L-CA pptd. by MRCOX-1. Capping and sequential immunopptn. studies indicated that HIS41 and MRCOX-30-binding mols. were identical. MRCOX-1, however, appeared to bind only a subset of these mols. Thus, this study confirms the identity of RT7.2 gene products and L-CA. It also revealed a difference between MRCOX-1 and MRCOX-30 not noticed previously.
CC 15-2 (Immunochemistry)

ST RT7 antigen leukocyte common monoclonal **antibody**
IT Leukocyte
(RT7 alloantigens of, **leukocyte common antigen related** to, monoclonal **antibody** in study of)
IT **Antigens**
RL: BIOL (Biological study)
(L-CA (**leukocyte common antigen**), RT7 **antigen related** to, monoclonal **antibody** in study of)
IT **Antigens**
RL: BIOL (Biological study)
(RT7, **leukocyte common antigen** family **related** to, monoclonal **antibody** in study of)
IT **Antibodies**
RL: PREP (Preparation)
(monoclonal, to RT7 alloantigens, prepn. and leukocyte common antigen reactivity of)

L17 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1986:183951 HCAPLUS
DOCUMENT NUMBER: 104:183951
TITLE: Evolution of glycophorin A in the hominoid primates studied with monoclonal **antibodies**, and description of a sialoglycoprotein analogous to human glycophorin B in chimpanzee
AUTHOR(S): Rearden, Ann
CORPORATE SOURCE: Dep. Pathol., Univ. California San Diego, La Jolla, CA, 92103, USA
SOURCE: J. Immunol. (1986), 136(7), 2504-9
CODEN: JOIMA3; ISSN: 0022-1767
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Comparison of human and primate erythrocyte membrane sialoglycoproteins showed that common chimpanzee, dwarf chimpanzee, gorilla, orangutan, and gibbon have major periodic acid Schiff-pos. proteins resembling human glycophorin A (GPA) monomer and dimer in electrophoretic mobility on SDS-PAGE. Immunoperoxidase staining of Western blots with monoclonal antibodies to human GPA showed that these primate bands express some GPA antigenic determinants. A new sialoglycoprotein analogous to human glycophorin B (GPB) was detected in common chimpanzee. Although human MN blood group phenotype results from an amino acid polymorphism of GPA, Western blots showed that in chimpanzee sialoglycoprotein (GPAch) always expresses the M blood group, whereas chimpanzee sialoglycoprotein (GPBch) expresses either the N blood group or a null phenotype. This result explains the detection of M and MN, but not of N, blood group phenotypes in chimpanzee. GPBch has higher apparent mol. wt. than human GPB, is present in the erythrocyte membrane in greater quantity than human GPB, and contains trypsin cleavage site(s) and the 10F7 determinant (both found on human GPA but not GPB). Expression of human GPA antigenic determinants was consistent with the phylogeny of the hominoid primates; common and dwarf chimpanzee expressed most of the determinants tested, gorilla and orangutan an intermediate no., and gibbon and siamang the least. Of the GPA antigenic determinants examd., the MN blood group determinants were most consistently expressed during evolution of the hominoid primates.

Variability in expression of GPA antigenic determinants between species may be due to both differences in amino acid sequence and glycosylation.
CC 13-5 (Mammalian Biochemistry)
Section cross-reference(s): 6, 15
IT Aotus lemurinus griseimembra
Gorilla gorilla gorilla
Hylobates **lar** entelloides
Symphalangus syndactylus
(glycophorin of, human glycophorin immunol. relatedness to, evolution in relation to)
IT **Antibodies**
RL: BIOL (Biological study)
(monoclonal, to glycophorin A of human)

L17 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1976:575386 HCAPLUS
DOCUMENT NUMBER: 85:175386
TITLE: Anti-DNP response in gibbons (Hylobates **lar**)
AUTHOR(S): Chaichanawong, Sirichai; Sirisinha, Stitaya
CORPORATE SOURCE: Fac. Sci., Mahidol Univ., Bangkok, Thailand
SOURCE: Immunochemistry (1976), 13(7), 623-7
CODEN: IMCHAZ
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The av. intrinsic assocn. const. of antidinitrophenyl antibody formed by gibbons during the immune response to dinitrophenylated bovine gammaglobulin varied from <103 to >108M-1. The biol. activities of the antibody prepns. changed in the same general direction as the assocn. const. However, a direct proportional relation between the biol. activities and the assocn. const. was not obsd. because a large change in the assocn. const. was assocd. with a smaller magnitude of change in biol.
activity.
CC 15-13 (Immunochemistry)
ST **antibody** dinitrophenyl gibbon
IT Hylobates **lar**
(anti-dinitrophenyl **antibody** formation of, affinity and evolution in relation to)
IT 2,4-Dinitrophenyl group
(**antibody** formation to, by gibbon, affinity and evolution in relation to)
IT **Antibodies**
RL: FORM (Formation, nonpreparative)
(formation of, to dinitrophenyl group by gibbon, affinity and evolution
in relation to)
IT Evolution
(of **antibody** affinity)

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L4            8 S L1 AND L2
L5          100 S PHOSPHATASE# (L) L1
L6            4 S L5 AND L2
L7            8 S L4 OR L6
L8           39 S LEUKOCYTE (2W) ANTIGEN# RELAT?
L9            2 S L8 AND L2
L10           9 S L9 OR L7
L11         857 S LEUKOCYTE COMMON (L) ANTIGEN#
L12          89 S L11 (L) L2
L13         170 S L11 (L) RELAT?
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L16           1 S L15 (L) L2
L17           9 S L16 OR L10
L18           0 S BP=6343=BP6343 OR (BP 6343 OR BP6343 )/AB
L19           0 S BP (2W) 6343 BP6343 OR (BP(2W)  6343 OR BP6343 )/AB
L20           1 S BP"="6343
L21           0 S BP"-"6343/AB

=> d bib 120


L20  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2001 ACS
AN   1999:800679  HCAPLUS
DN   132:49031
TI   Antibody to phosphatase subunit of human leukocyte common antigen LAR and
     clinical use
IN   Yamamoto, Hiroshi; Tsujikawa, Kazutake; Uchino, Yukiko; Konishi, Noboru
PA   Fuso Pharmaceutical Industries, Ltd., Japan
SO   PCT Int. Appl., 104 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.         KIND  DATE          APPLICATION NO.  DATE
     ---------------    ----  --------      ---------------  --------
PI   WO 9964591         A1    19991216      WO 1999-JP3054   19990607
         W:  AU, CA, JP, KR, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
     AU 9940603         A1    19991230      AU 1999-40603    19990607
     EP 1092772         A1    20010418      EP 1999-923958   19990607
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
PRAI WO 1998-JP2542     A     19980608
     WO 1999-JP3054     W     19990607
RE.CNT  8
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RE
(1) Faure, P; Caner 1988, V61(9), P1852 MEDLINE
(2) Kanemitsu, O; Chijin Shokan 1994, P145
(3) Lawrence, P; J Neurochem 1995, V64(3), P1305
(4) Michel, S; EMBO J 1992, V11(3), P897
(7) Shvero, J; Cancer 1988, V62(2), P319 MEDLINE
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d it l20

L20 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
IT Immunoassay
(LAR mol. detn. by; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)
IT Antisense DNA
Ribozymes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-thyroid cancer agent contg.; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)
IT Hybridoma
(clone YU1; FERM **BP-6343**; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)
IT cDNA sequences
(for phosphatase subunit of human leukocyte common antigen LAR)
IT Thyroid gland, neoplasm
(immunodiagnosis of; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)
IT Diagnosis
(immunodiagnosis, of thyroid diseases; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)
IT Thyroid gland, neoplasm
(inhibitors, DDS; monoclonal antibody-contg.; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)
IT Antigens
RL: ANT (Analyte); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(leukocyte common antigen LAR; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)
IT CD45 (antigen)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(monoclonal antibody non-reactive to; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)
IT Antibodies
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monoclonal, to LAR; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)
IT Probes (nucleic acid)
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(of LAR cDNA; antibody to phosphatase subunit of human leukocyte common

antigen LAR and clin. use)

IT Protein sequences
(of phosphatase subunit of human leukocyte common antigen LAR)

IT Antitumor agents
(thyroid, DDS; monoclonal antibody-contg.; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)

IT 252362-91-7
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(amino acid sequence; phosphatase subunit; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)

IT 9013-05-2, Phosphatase
RL: ANT (Analyte); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)

IT 50812-37-8D, Glutathione-S-transferase, fusion protein with LAR phosphatase subunit
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)

IT 252362-93-9
RL: BOC (Biological occurrence); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(nucleotide sequence; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)

IT 252647-41-9, 2: PN: WO9964591 SEQID: 3 unclaimed DNA
RL: PRP (Properties)
(unclaimed nucleotide sequence; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)

IT 252647-39-5
RL: PRP (Properties)
(unclaimed protein sequence; antibody to phosphatase subunit of human leukocyte common antigen LAR and clin. use)

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=> fil wpids

FILE 'WPIDS' ENTERED AT 10:14:32 ON 12 JUL 2001
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FILE LAST UPDATED: 04 JUL 2001                    <20010704/UP>
MOST RECENT DERWENT UPDATE                200137   <200137/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,
    SEE http://www.derwent.com/covcodes.html  <<<

=> d his


     (FILE 'WPIDS' ENTERED AT 10:09:34 ON 12 JUL 2001)
                DEL HIS
L1           131 S LAR
L2             0 S LEUKOCYTE (2W) ANTIGEN# RELATED
L3         39160 S ANTIBOD?
L4             7 S L1 AND L3
L5            10 S L1 AND D16/DC
L6             5 S L5 NOT L4
L7             0 S BP6343 OR BP 6343 OR BP"-"6343

     FILE 'WPIDS' ENTERED AT 10:14:32 ON 12 JUL 2001

=> d .wp l4 1-7; d .wp l6 1-5


L4   ANSWER 1 OF 7  WPIDS COPYRIGHT 2001   DERWENT INFORMATION LTD
AN   2000-647399 [62]   WPIDS
DNN  N2000-479758       DNC C2000-195899
TI   Treating a disease or a disorder characterized by epithelial cell
     migration comprises administering a pharmaceutically acceptable
     composition comprising PTP LAR.
DC   B04 D16 S03
IN   MULLER, T; ULLRICH, A
PA   (PLAC) MAX PLANCK INST
CYC  90
PI   WO 2000061180 A2 20001019 (200062)* EN  107p
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SL SZ TZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES
            FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
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LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000042109 A 20001114 (200108)
ADT WO 2000061180 A2 WO 2000-US9274 20000406; AU 2000042109 A AU 2000-42109 20000406
FDT AU 2000042109 A Based on WO 200061180
PRAI US 1999-128673 19990409
AB WO 200061180 A UPAB: 20001130
NOVELTY - Treating a disease or a disorder comprising administering a pharmaceutically acceptable composition comprising PTP **LAR**, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method (M1) for detection of PTP **LAR** in a sample as a prognostic tool for a disease or disorder comprising:

(a) contacting the sample with a nucleic acid probe which hybridizes to a nucleic acid target region of PTP **LAR**, where the probe comprises the nucleic acid sequence encoding (complements of) PTP **LAR** fragment; and

(b) detecting the presence or the amount of the probe:target region hybrid;

(2) a method (M2) for detection of PTP **LAR** in a sample as a prognostic tool for a disease or disorder comprising:

(a) comparing a nucleic acid target region encoding PTP **LAR** in a sample with a control nucleic acid target region encoding PTP **LAR**; and

(b) detecting differences in a sequence or amount between the target region and the control target;

(3) a method (M3) for detection of PTP **LAR** in a sample as a prognostic tool for a disease or disorder comprising:

(a) contacting the sample with an **antibody**, which hybridizes to an amino acid target region of PTP **LAR**; and

(b) detecting the presence or the amount of the **antibody** :target region complex;

(4) a method (M4) for detection of PTP **LAR** in a sample as a prognostic tool for a disease or disorder comprising detecting the presence or amount of PTP **LAR**;

(5) a method (M5) for identifying one or more compounds that modulate epithelial cell migration comprising:

(a) contacting tyrosine phosphorylated beta -catenin with one or more potential compounds; and

(b) monitoring a change in the phosphorylation level of tyrosine phosphorylated beta -catenin;

(6) a method (M6) for identifying one or more compounds that modulate PTP **LAR** comprising:

(a) contacting PTP **LAR** with one or more potential compounds;

(b) measuring the activity of PTP **LAR**; and

(c) determining whether the potential compounds modulate the activity of PTP **LAR**; and

(7) a method (M7) for identifying one or more compounds that modulate PTP **LAR** activity in cells comprising:

(a) expressing PTP **LAR** in cells;
(b) contacting cells with one or more potential compounds; and
(c) monitoring a change in cell migration or the interaction between PTP **LAR** and a natural binding partner;
(8) treating a disease or disorder characterized by epithelial cell migration comprising administering one or more compounds identified by M5 - M7.

ACTIVITY - Cytostatic; vulnerary, antiinflammatory; antidiabetic, antipsoriatic.

No supporting biological data given.

MECHANISM OF ACTION - None given.

USE - For treating a disease characterized by epithelial cell migration, especially cancer and aberrant wound healing (claimed). This method my also be used to treat diseases and disorders with abnormal cell proliferative conditions, including fibrotic and mesangial disorders, abnormal angiogenesis and vasculogenesis, psoriasis, diabetes mellitus and inflammation.

Dwg.0/11

L4 ANSWER 2 OF 7 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2000-182215 [16] WPIDS
DNN N2000-134480 DNC C2000-056927
TI **Antibody** for diagnosis and treatment of insulin resistance disorders and syndrome X recognises the intracellular domains of tyrosine kinases.
DC B04 D16 S03
IN 'TSUJIKAWA, K; UCHINO, Y; YAMAMOTO, H
PA (FUSO) FUSO PHARM IND LTD
CYC 30
PI WO 2000002922 A1 20000120 (200016)* JA 83p
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU CA JP KR US
AU 9945317 A 20000201 (200028)
EP 1097944 A1 20010509 (200128) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
ADT WO 2000002922 A1 WO 1999-JP3656 19990706; AU 9945317 A AU 1999-45317 19990706; EP 1097944 A1 EP 1999-928210 19990706, WO 1999-JP3656 19990706
FDT AU 9945317 A Based on WO 200002922; EP 1097944 A1 Based on WO 200002922
PRAI WO 1998-JP3120 19980710
AB WO 200002922 A UPAB: 20000330
NOVELTY - **Antibody** recognising the intracellular domains of two or more protein tyrosine kinases is new.

DETAILED DESCRIPTION - New **antibody** recognises the intracellular domains of two or more protein tyrosine kinases (PTP).

INDEPENDENT CLAIMS are also included for hybridomas expressing the **antibody** and methods for their production.

USE - The **antibody** is useful for the detection and assay of PTP including novel phosphatases generated by cloning; and diagnosis, treatment and prevention of insulin resistance related diseases and non-insulin dependent diabetes mellitus, syndrome X and arteriosclerosis and heart disorders.

Dwg.0/10

L4 ANSWER 3 OF 7 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2000-097539 [08] WPIDS

DNN N2000-075369 DNC C2000-028330
TI **Antibody** recognizing the intracellular domain of the human tyrosine phosphatase **LAR**.
DC B04 D16 S03
IN KONISHI, N; TSUJIKAWA, K; UCHINO, Y; YAMAMOTO, H
PA (FUSO) FUSO PHARM IND LTD
CYC 24
PI WO 9964591 A1 19991216 (200008)* JA 104p
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU CA JP KR US
AU 9940603 A 19991230 (200022)
EP 1092772 A1 20010418 (200123) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
ADT WO 9964591 A1 WO 1999-JP3054 19990607; AU 9940603 A AU 1999-40603 19990607; EP 1092772 A1 EP 1999-923958 19990607, WO 1999-JP3054 19990607
FDT AU 9940603 A Based on WO 9964591; EP 1092772 A1 Based on WO 9964591
PRAI WO 1998-JP2542 19980608
AB WO 9964591 A UPAB: 20000215
NOVELTY - An **antibody** recognizing the intracellular domain of the human tyrosine phosphatase **LAR**.
DETAILED DESCRIPTION - An **antibody** is new which recognizes the intracellular domain of the human tyrosine phosphatase **LAR**. INDEPENDENT CLAIMS cover the preparation of the **antibody** using as antigen a fusion protein incorporating the **LAR** intracellular domain; and hybridomas expressing the **antibody**.
USE - The **antibody** is used for the diagnosis and treatment of thyroid cancer.
Dwg.0/14

L4 ANSWER 4 OF 7 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1993-260346 [33] WPIDS
DNN N1993-200322 DNC C1993-115549
TI New monoclonal **antibody** to human aldol reductase - used in immunoassays, for studying the development and treatment of diabetic complications.
DC B04 D16 S03
IN NISHIMURA, C; TACHIKAWA, T; TSUBOUCHI, J; URAKAMI, T
PA (MITN) MITSUBISHI GAS CHEM CO INC
CYC 4
PI EP 556106 A2 19930818 (199333)* EN 15p
R: DE FR GB
JP 05317083 A 19931203 (199402) 22p
EP 556106 A3 19940406 (199522)
JP 2680229 B2 19971119 (199751) 13p
ADT EP 556106 A2 EP 1993-400308 19930208; JP 05317083 A JP 1992-236207 19920903; EP 556106 A3 EP 1993-400308 19930208; JP 2680229 B2 JP 1992-236207 19920903
FDT JP 2680229 B2 Previous Publ. JP 05317083
PRAI JP 1992-25248 19920212
AB EP 556106 A UPAB: 19931119
(A) A novel monoclonal **antibody** (MAb) is capable of binding to human aldose reductase (**LAR**); Also claimed are: (B) a hybridoma producing a MAb as in (A); (C) a method of immunoassay for **LAR** by the use of a MAb capable of binding to **LAR** and/or a polyclonal **antibody** capable of binding to **LAR**.
USE - The immunoassay for **LAR** in body fluids can be used to study the function and dynamics of **LAR**, partic. in the

development of diabetic complications. It can also be used to determine **LAR** levels after administration of aldose reductase inhibitors which have been developed as therapeutic agents for diabetic complications. The **antibodies** can also be used for isolation and purification of **LAR**.
Dwg.0/0

L4 ANSWER 5 OF 7 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1992-056865 [07] WPIDS
CR 1994-151249 [18]; 1994-279729 [34]; 1994-279730 [34]; 1996-353827 [35]; 1999-253232 [21]; 2001-070117 [04]
DNN N1992-043245 , DNC C1992-025704
TI Human receptor-type protein tyrosine phosphatase - has DNA encoding it and

antibodies specific for it, useful for screening drugs affecting R-ptpase activity, and detect mutant genes.
DC B04 D16 S03
IN SCHLESSINGER, J; SCHLESSING, J
PA (UYNY) UNIV NEW YORK STATE
CYC 17
PI WO 9201050 A 19920123 (199207)*
RW: AT BE CH DE DK ES FR GB GR IT LU NL SE
W: AU CA JP
AU 9184128 A 19920204 (199220)
EP 538401 A1 19930428 (199317) EN 77p
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
JP 05508777 W 19931209 (199403) 24p
EP 538401 A4 19930908 (199527)
AU 662296 B 19950831 (199543)
EP 538401 B1 19990728 (199934) EN
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
DE 69131482 E 19990902 (199942)
ADT AU 9184128 A AU 1991-84128 19910711, WO 1991-US4892 19910711; EP 538401 A1 EP 1991-914996 19910711, WO 1991-US4892 19910711; JP 05508777 W JP 1991-514066 19910711, WO 1991-US4892 19910711; EP 538401 A4 EP 1991-914996 ; AU 662296 B AU 1991-84128 19910711; EP 538401 B1 EP 1991-914996 19910711, WO 1991-US4892 19910711; DE 69131482 E DE 1991-631482 19910711, EP 1991-914996 19910711, WO 1991-US4892 19910711
FDT AU 9184128 A Based on WO 9201050; EP 538401 A1 Based on WO 9201050; JP 05508777 W Based on WO 9201050; AU 662296 B Previous Publ. AU 9184128, Based on WO 9201050; EP 538401 B1 Based on WO 9201050; DE 69131482 E Based on EP 538401, Based on WO 9201050
PRAI US 1991-654188 19910226; US 1990-551270 19900711
AB WO 9201050 A UPAB: 20010207
A human receptor-type protein tyrosine phosphatase (R-PTPase) protein or glycoprotein mol. other than leucocyte common antigen (CD45) and leucocyte common antigen-related protein (**LAR**), functional derivatives, and homologues in other mammals are new. Where the mol. occurs naturally, it is free of other proteins or glycoproteins with which it is natively associated, and is normally present in mammalian liver, kidney and brain.

Also claimed are: (1) a DNA mol. encoding the R-PTPase; (2) prokaryotic and eukaryotic hosts transformed/transfected with the mol. of

(1); (3) prepn. of the R-PTPase protein or glycoprotein or functional derivative by culturing a host capable of expressing the protein and recovering the protein from the culture; (4) an **antibody** (esp. monoclonal) specific for the R-PTPase.

The R-PTPase may be R-PTPase-alpha,-beta, or -gamma having aminoacid sequences defined in the specification. The corresponding nucleotide sequence are also defined.

0/7

L4 ANSWER 6 OF 7 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1989-152101 [21] WPIDS
DNN N1989-116087 DNC C1989-067222
TI Synthetic peptide(s) and conjugates based upon them - are useful in detecting LAV-HTLV III **antibodies** for diagnosis of aids and arc.
DC B04 S03
IN BELLINI, F; DIONNE, G; LACROIX, M
PA (IAFB-N) IAF BIOCHEM INT INC
CYC 11
PI EP 316495 A 19890524 (198921)* EN 9p
R: AT BE CH DE FR GB IT LI NL SE
JP 01153700 A 19890615 (198930)
ADT EP 316495 A EP 1987-402621 19871119; JP 01153700 A JP 1987-305520 19871202
PRAI EP 1987-402621 19871119
AB EP 316495 A UPAB: 19930923
Synthetic peptides (I) of formula
H2N-Ser-Gly-Lys-Leu- Ile-Cys-Thr-Thr-Ala-Val-Pro-Trp-Asn-Ala-Ser-COOH (IA)
and H2N-Tyr-Ser-Gly-Lys-Leu -Ile-Cys-Thr-Thr-Ala-Val-Pro -Trp-Asn-Ala-Ser-COOH (IB) are new.
Also claimed are conjugates of (I) coupled to a carrier, pref. via. SH gps. Pref. the carrier is keyhole limpet haemocyanine (KLH).
(IA) duplicate the sequence of env-**lar** regions 606-620 of HTLV-III and corresponds to sequence 40-54 of the 'peptide 121' of Chang et al, Biotechnology, 3, 905-909 (1985). (IB) is an analogues of region 605-620 in which Cys605 has been replaced by Tyr. (IA)/(IB) are prepd. by conventional solid phase method.
(I) are conjugated to e.g. thyroglobulin, BSA, ovalbumin, poly-DL-alanine-poly-L-lysine or pref. KLH by known methods. Pref. amino gps. of KLH are acylated by the activated N-hydroxysuccinimide ester gp. of a sulpho-maleimido benzoyl-N- hydroxysuccinimide ester, giving KLH carrying a maleimide spacer, followed by reaction of the spacer with the SH gp. of the peptide.
USE/ADVANTAGE - Used for detecting the presence of anti-LAV/HTLV-III **antibodies** in serum for diagnosis of AIDS or ARC. The conjugates provide an efficient, precise and cheap routine diagnostic test.
0/0

L4 ANSWER 7 OF 7 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1986-251102 [38] WPIDS
DNC C1986-108317
TI Predicting course of cardiac ischaemia - involves supplementary blood testing to increase accuracy of prognosis.
DC B04
IN DVORKIN, M I; KITAEV, M I
PA (KGCA-R) KIRG CARDIOLOGY RES
CYC 1

PI SU 1210835 A 19860215 (198638)* 3p
ADT SU 1210835 A SU 1981-3393259 19811215
PRAI SU 1981-3393259 19811215
AB SU 1210835 A UPAB: 19930922
The supplementary tests involve determn. of:- indicator of neutrophil damage (IND); leucocyte agglomeration reaction (**LAR**); retardation of leucocyte migration (RLM). As previously, the method involves determn. of the titre of anticardial **antibodies** (TAA) on necrotic cardial antigens in the patients' blood.

The accepted test values for healthy patients are:- IND 0.08; **LAR** 71.1%; TAA 0.08; RLM 0.64. A deviation of at least 3 of the indicators from the accepted levels in the test blood prognosticates deterioration in the course of ischaemic disease.

Typically, in clinical tests the proposed method diagnosed unfavourable development of illness in cases of myocardial infarction in 82% of the patients (previous method only diagnosed 28% cases).

USE/ADVANTAGE - Increased accuracy of prediction of cardiac ischaemia in medical practice, esp. in clinical cardiology. Bul.6/15.2.86 0/0

L6 ANSWER 1 OF 5 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2001-080598 [09] WPIDS
DNN N2001-061358 DNC C2001-023218
TI New substrate trapping mutant protein tyrosine phosphatases (PTP) in which the wild type PTP catalytic domain invariant aspartate is replaced with an unphosphorylated amino acid, useful in gene therapy.
DC B04 **D16** S03
IN TONKS, N K; ZHANG, S
PA (COLD-N) COLD SPRING HARBOR LAB
CYC 93
PI WO 2000075339 A1 20001214 (200109)* EN 109p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000052842 A 20001228 (200119)
ADT WO 2000075339 A1 WO 2000-US14211 20000524; AU 2000052842 A AU 2000-52842 20000524
FDT AU 2000052842 A Based on WO 200075339
PRAI US 1999-334575 19990616; US 1999-137319 19990603
AB WO 200075339 A UPAB: 20010213
NOVELTY - A new substrate trapping mutant protein tyrosine phosphatase (STM-PTP) in which:

(a) the wild type PTP catalytic domain invariant aspartate residue is replaced with an amino acid that does not significantly alter the Km but results in a Kcat reduction to less than 1 per minute; and

(b) at least one wild type tyrosine residue is replaced with an amino

acid that is not capable of being phosphorylated.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) identifying (M1) a tyrosine phosphorylated protein (TPP) which is a substrate of a PTP comprising:

(a) combining a sample containing at least 1 TPP with at least 1 STM-PTP; and

(b) determining the presence or absence of a complex containing the TPP and STM-PTP where the presence of the complex indicates that the TPP is a substrate of the PTP;

(2) identifying (M2) an agent that alters the interaction between a PTP and a TPP comprising:

(a) contacting in the absence and presence of a candidate agent, a STM-PTP and a TPP;

(b) determining the presence or absence of a STM-PTP/TPP complex; and

(c) comparing:

(i) the level of dephosphorylation of the substrate in the absence of the agent compared to the level in the presence of the agent; or

(ii) the level of complex formation in the absence of the substrate compared to the level in the presence of the agent;

(3) reducing (M3) the activity of a TPP by administering to a subject a STM-PTP, where interaction of the STM-PTP with the TPP reduces the activity of the TPP;

(4) reducing (M4) the transforming effect of at least 1 oncogene or the formation of signaling complexes associated with p130cas, by administering to a mammal capable of expressing p130cas, STM-PTP-PEST (not defined), where it interacts with p130cas to reduce the transforming effect of at least 1 oncogene associated with p130cas phosphorylation or the formation of signaling complexes associated with p130cas;

(5) reducing (M5) cytotoxic effects associated with PTP administration or overexpression by administering to a mammal STM-PTP;

(6) an isolated nucleic acid (I) encoding STM-PTP;

(7) an antisense oligonucleotide comprising at least 15 consecutive nucleotides complementary to (I);

(8) a fusion protein comprising a polypeptide sequence fused to STM-PTP;

(9) a recombinant expression construct (II) comprising at least one promoter operably linked to (I);

(10) a host cell (III) comprising (II);

(11) producing STM-PTP by culturing (III); and

(12) a kit for identifying a TPP substrate of a PTP comprising at least 1 STM-PTP and ancillary reagents.

ACTIVITY - None given.

MECHANISM OF ACTION - Gene therapy.

USE - The STM-PTP is useful where biological regulation involving PTP-regulated signal transduction is involved. It may also be used therapeutically to alter the activity of a tyrosine phosphorylated protein, such as by gene therapy. Compounds identified as capable of altering PTP-substrate interaction are valuable for therapeutic and/or diagnostic purposes, since they permit treatment and/or detection of diseases associated with PTP activity. Such compounds are also valuable in

research directed to molecular signaling mechanisms that involve PTPs, and to refinements in the discovery and development of future compounds exhibiting greater specificity.
Dwg.0/11

L6 ANSWER 2 OF 5 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1995-052101 [07] WPIDS
DNC C1995-023942
TI Salmonella nucleic acid molecules - used to provide probes and primers for the general and specific detection of Salmonella strains.
DC B04 **D16**
IN AABO, S; OLSEN, J E; RASMUSSEN, O F; ROSSEN, L; RASMUSSEN, O; OLSEN, J
PA (BIOT-N) BIOTEKNOLOGISK INST; (HOLM-I) HOLMES M J
CYC 55
PI WO 9500664 A1 19950105 (199507)* EN 46p
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE
W: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KE KG KP KR KZ LK LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA US UZ VN
AU 9469756 A 19950117 (199521)
FI 9506052 A 19951215 (199609)
NO 9505119 A 19951215 (199611)
EP 707659 A1 19960424 (199621) EN
R: AT BE CH DE DK FR GB IE IT LI NL SE
JP 08510386 W 19961105 (199708) 41p
EP 707659 B1 19971203 (199802) EN 28p
R: AT BE CH DE DK FR GB IE IT LI NL SE
DE 69407187 E 19980115 (199808)
US 6004747 A 19991221 (200006)
JP 3016399 B2 20000306 (200016) 24p
CA 2164941 C 20010417 (200128) EN
ADT WO 9500664 A1 WO 1994-GB1316 19940617; AU 9469756 A AU 1994-69756 19940617; FI 9506052 A WO 1994-GB1316 19940617, FI 1995-6052 19951215; NO 9505119 A WO 1994-GB1316 19940617, NO 1995-5119 19951215; EP 707659 A1 EP 1994-918438 19940617, WO 1994-GB1316 19940617; JP 08510386 W WO 1994-GB1316 19940617, JP 1995-502557 19940617; EP 707659 B1 EP 1994-918438 19940617, WO 1994-GB1316 19940617; DE 69407187 E DE 1994-607187 19940617, EP 1994-918438 19940617, WO 1994-GB1316 19940617; US 6004747 A WO 1994-GB1316 19940617, US 1996-564110 19960311; JP 3016399 B2 WO 1994-GB1316 19940617, JP 1995-502557 19940617; CA 2164941 C CA 1994-2164941 19940617
FDT AU 9469756 A Based on WO 9500664; EP 707659 A1 Based on WO 9500664; JP 08510386 W Based on WO 9500664; EP 707659 B1 Based on WO 9500664; DE 69407187 E Based on EP 707659, Based on WO 9500664; US 6004747 A Based on WO 9500664; JP 3016399 B2 Previous Publ. JP 08510386, Based on WO 9500664
PRAI GB 1993-12508 19930617
AB WO 9500664 A UPAB: 19950223
(A) A nucleic acid molecule for the detection and identification of Salmonella species is claimed comprising a single stranded DNA which includes a sequence shown in the specification (1972 bases) or complementary DNA sequences or their analogues or fragments which hybridise selectively to the DNA or RNA of one or more Salmonella serotypes. Also claimed are (B) a nucleic acid molecule as in (A) for use as a probe or a primer in a DNA-based detection system, (C) a nucleic acid

molecule which includes at least one of the sequences TTACCCTGAC AGCCGTAGAT ATCTC (I), CCGCTACTCC GCCCTAATCC ACAT (II), CGGCTTCAGG CTTTCTCTTA TTGGC (III) or complementary DNA sequences or analogues or fragments which hybridise selectively to the DNA or RNA of one or more Salmonella serotypes, (D) kits for use in detecting Salmonella species using the PCR technique, the DIANA technique, the 3SR technique, the **LAR** technique or the Q-beta replicase amplification technique.

USE - The nucleic acid molecules are used for detection of one or more Salmonella serotypes (claimed).

ADVANTAGE - The nucleic acid molecules can provide assays that are more sensitive than the standard culture method for identification of Salmonella in pre-enriched cultures.

Dwg.0/4

L6 ANSWER 3 OF 5 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1995-036502 [05] WPIDS
DNC C1995-016436
TI Bacteria coding system for Streptococcus, Corynebacterium, yeasts - based on the results of 9-15 tests for each group.
DC **D16**
IN HE, L; LIANG, B; LIU, Q; WANG, J
PA (HELL-I) HE L
CYC 47
PI WO 9429480 A1 19941222 (199505)* ZH 78p
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE
W: AT AU BB BG BR BY CA CH CZ DE DK ES FI GB HU JP KP KR KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US UZ VN
AU 9469233 A 19950103 (199521)
CN 1081717 A 19940209 (199522)
CN 1083112 A 19940302 (199524)
EP 704538 A1 19960403 (199618) EN 46p
R: DE FR GB SE
AU 691500 B 19980521 (199832)
US 5783410 A 19980721 (199836)
RU 2138556 C1 19990927 (200037)
ADT WO 9429480 A1 WO 1994-CN44 19940614; AU 9469233 A AU 1994-69233 19940614; CN 1081717 A CN 1993-106932 19930614; CN 1083112 A CN 1993-106931 19930614; EP 704538 A1 EP 1994-917544 19940614, WO 1994-CN44 19940614; AU 691500 B AU 1994-69233 19940614; US 5783410 A WO 1994-CN44 19940614, US 1996-569210 19960528; RU 2138556 C1 WO 1994-CN44 19940614, RU 1996-103367 19940614
FDT AU 9469233 A Based on WO 9429480; EP 704538 A1 Based on WO 9429480; AU 691500 B Previous Publ. AU 9469233, Based on WO 9429480; US 5783410 A Based on WO 9429480; RU 2138556 C1 Based on WO 9429480
PRAI CN 1993-106931 19930614; CN 1993-106932 19930614
AB WO 9429480 A UPAB: 19950207
A bacteria coding method for the following types of bacteria comprises carrying out the following tests: (1) non-enteral Gram negative bacilli are classified by tests for 2-keto gluconate (2KG), 3-hydroxybenzoate (3HB), 3-hydroxybutyrate (OBu), citrate (CIT), L-proline (L-Pro), histidine (His), N-acetyl-D-glucosamine (NAG), glycogen (GLY), maltose (MAL), sucrose (SUC), D-melibiose (MEL), L-fucose (FUC), D-Glucose (GLU), inositol (INO) and mannitol (MAN); (2) enteral Gram negative bacilli are classified by tests for oxidase (OXI), growth in MCK agar (MCK), motility (MOT), lysine decarboxylase (LDC), ornithine decarboxylase (ODC), arginine dihydrolase (ADH), indole prodn. (IND), urease (URE), CIT, mannitol

fermentation (MANF), sucrose fermentation (SUCF), rhamnose fermentation (RHAF), amygdalin fermentation (AMYF) and sorbitol fermentation (SORF); (3) Enterobacteriaceae are classified by tests for LDC, ODC, malonate utilisation (MAU), URE, cellobiose fermentation (CELF), SORF, arabinose fermentation (LARF), adonitol fermentation (ADO), SUCF, dulcitol fermentation (DULF), alpha-methyl-D-glucoside fermentation (AMGF), and MANF ; (4) anaerobes are classified by tests for Gram staining (GRS), sporulation (SPO), alpha-glucosidase (AGL), alpha-galactosidase (AGA), alpha-arabinosidase (AAR), beta-glucosidase (BGL), beta-galactosidase (BGA), beta-glucuronidase (BGU), leucine aryl amidase (LAA), proline aryl amidase (PRA), alkaline phosphatase (ALP), indole prodn. (IND), mannose fermentation (MASF), NAG; (5) Haemophilus/Neisser bacteria are classified by tests for catalase (CAT), growth in Martin & Thayer medium (MTM), glucose fermentation (GLUF), maltose fermentation (MLTF), BGA, phenyl phosphonate (OPS), glycine-p-nitroanilide (GLT), gamma-glutamyl-p-nitroanilide (GGT), proline-p-nitroanilide (PRT), resazurin (RES); (6) curved bacilli are classified by tests for CAT, nitrate redn. (NIT), URE, succinate assimilation (SUT) acetate assimilation (ACE), hippurate hydrolysis (HIP), hydrogen sulphide prodn. (HYS), GGT and ALP; (7) yeasts are classified by 2KG, actidione (ACT), erythritol (ERY), MAN, inositol (INO), NAG, arabinose (**LAR**), galactose (GAL), raffinose (RAF), cellobiose (CEL), lactose (LAC), maltose (MAL), melibiose (MEL), trehalose

(TRE) and esculin (ESC); (8) corynebacterium are classified using NIT, URE, ESC, MALF, SUCF ribose fermentation (RIBF), lactose fermentation (LACF), AGL, BGL; (9) Micrococcus are classified by URE, NIT, acetoin prodn. (V-P), ADH, ODC, ALP, BGA, BGU, GLUF, SUCF, MANF, trehalose fermentati

Dwg.0/2

L6 ANSWER 4 OF 5 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1988-271167 [38] WPIDS
CR 1994-048495 [06]
DNC C1988-120739
TI Plant gum prodn. by tissue culture - useful in food prods. as emulsifier, stabiliser, thickener, gelling agent, etc..
DC D13 **D16**
IN BACIC, A; CLARKE, A E; LANE, A G
PA (BIOP-N) BIO POLYMERS PTY LTD; (CSIR) COMMONWEALTH SCI & IND RES ORG;
SCI (BIOP-N) BIOPOLYMERS PTY LTD; (CLAR-I) CLARKE A E; (CSIR) COMMONWEALTH ORG
CYC 18
PI WO 8806627 A 19880907 (198838)* EN 21p
RW: AT BE CH DE FR GB IT LU NL SE
W: AU DK FI JP US
AU 8813948 A 19880926 (198851)
DK 8805944 A 19881026 (198918)
FI 8904001 A 19890825 (198949)
EP 346375 A 19891220 (198951) EN
R: AT BE CH DE FR GB IT LI LU NL SE
JP 02502335 W 19900802 (199037)
US 5133979 A 19920728 (199233) 5p
US 5296245 A 19940322 (199411) 11p
EP 346375 A4 19900117 (199510)
CA 1334290 C 19950207 (199513)

EP 346375 B1 19970115 (199708) EN 10p
R: AT BE CH DE FR GB IT LI LU NL SE
DE 3855758 G 19970227 (199714)
US 5747297 A 19980505 (199825)
SG 47515 A1 19980417 (199826)
FI 104093 B1 19991115 (200001)
ADT WO 8806627 A WO 1988-AU52 19880226; EP 346375 A EP 1988-902082 19880226; JP 02502335 W JP 1988-502174 19880226; US 5133979 A WO 1988-AU52 19880226,
US 1989-415263 19891025; US 5296245 A CIP of US 1989-415263 19891025, US 1992-920788 19920728; EP 346375 A4 EP 1988-902082 ; CA 1334290 C CA 1988-559957 19880226; EP 346375 B1 EP 1988-902082 19880226, WO 1988-AU52 19880226; DE 3855758 G DE 1988-3855758 19880226, EP 1988-902082 19880226, WO 1988-AU52 19880226; US 5747297 A CIP of WO 1988-AU52 19880226, CIP of US 1989-415263 19891025, CIP of US 1992-920688 19920728, US 1995-409737 19950323; SG 47515 A1 SG 1996-2587 19880226; FI 104093 B1 WO 1988-AU52 19880226, FI 1989-4001 19890825
FDT US 5133979 A Based on WO 8806627; US 5296245 A CIP of US 5133979; EP 346375 B1 Based on WO 8806627; DE 3855758 G Based on EP 346375, Based on WO 8806627; US 5747297 A CIP of US 5133979; FI 104093 B1 Previous Publ.
FI 8904001
PRAI AU 1987-4502 19870922; AU 1987-556 19870226; AU 1988-13948 19870304
AB WO 8806627 A UPAB: 20000105
Prodn. of plant gum prod. comprises (a) culturing gum-secreting plant cells from tissues of **lar** plants in suspension culture in a culture medium; and (b) recovering the gum prod. from the medium. Food prods. contg. the obtd. gum prod. are also claimed.
The plant cells are derived from the pear (pyrus), sweet cherry (prunus arium) or rose (rosa). The prod. is recovered by selective filtration and/or alcohol pptn.
Dwg.0/1

L6 ANSWER 5 OF 5 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1982-010296 [29] WPIDS
TI Prepn. of G- and V-penicillin - by aerobic fermentation of P chrysogenum (**LAR** 0190).
DC B02 **D16**
PA (BIOG) BIOGAL GYOGYSZERGYAR
CYC 1
PI HU 22761 T 19820628 (198229)*
PRAI HU 1980-3122 19801228

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(FILE 'MEDLINE' ENTERED AT 10:17:45 ON 12 JUL 2001)
DEL HIS Y

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L1          824 S LAR
L2       276961 S PHOSPHAT?
L3          147 S L1 AND L2
L4           18 S L3 AND ANTIBOD?
L5       100385 S ANTIBODIES, MONOCLONAL+NT/CT
L6           10 S L1 AND L5
                E HYBRIDOMA/CT
                E E5+ALL
L7         9165 S HYBRIDOMAS/CT
L8            0 S L1 AND L7
L9            0 S BP 6343 OR BP6343 OR BP"-"6343
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FILE 'BIOSIS' ENTERED AT 10:23:33 ON 12 JUL 2001

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L10        1538 S LAR
L11      485570 S ANTIBOD?
L12        1538 S L10 (L) L1
L13          67 S L10 (L) L11
L14      351536 S MONOCLO? OR HYBRID?
L15          16 S L13 AND L14
L16         212 S L1 AND (PHOSPHATAS? OR LEUKOCYT?)
L17          19 S L11 AND L16
L18           6 S L17 AND (L14)
L19       89205 S THYROID?
L20           6 S L19 AND L10
L21           0 S L20 AND L11
L22     1029634 S CANCER? OR TUMO? OR NEOPLAS? OR CARCINOMA?
L23           4 S L13 AND L22
L24          34 S L16 AND L22
L25           1 S L24 AND L19
L26           2 S L17 AND (L19 OR L22)
L27          12 S L18 OR L26 OR  L23 OR L25
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FILE 'BIOSIS, MEDLINE' ENTERED AT 10:30:16 ON 12 JUL 2001

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L28          19 DUP REM L27 L6 (3 DUPLICATES REMOVED)
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d bib ab it ct l28 1-19

L28 ANSWER 1 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS
AN 2001:234779 BIOSIS
DN PREV200100234779
TI Differential effects of **leukocyte** common antigen-related protein on biochemical and biological activities of RET-MEN2A and RET-MEN2B mutant proteins.
AU Qiao, Shanlou; Iwashita, Toshihide; Furukawa, Tatsuhiko; Yamamoto, Masahiko; Sobue, Gen; Takahashi, Masahide (1)
CS (1) Department of Pathology, Nagoya University Graduate School of Medicine, 65 Tsurumai-cho, Showa-ku, Nagoya, 466-8550:

mtakaha@med.nagoya-u.ac.jp Japan
SO Journal of Biological Chemistry, (March 23, 2001) Vol. 276, No. 12, pp. 9460-9467. print.
ISSN: 0021-9258.
DT Article
LA English
SL English
AB Protein-tyrosine-**phosphatases** (PTPs), in conjunction with protein-tyrosine Kinases, play essential regulatory roles in diverse cellular activities by modulating the phosphorylation state of target proteins. **Leukocyte** common antigen-related (**LAR**) protein is a widely expressed receptor-type protein-tyrosine-**phosphatase** that is implicated in the regulation of intracellular signaling triggered by both cell adhesion and peptide growth factors. The gene for **LAR** is localized to human chromosome 1p32, a region frequently deleted in **tumors** of neuroectodermal origin, including neuroblastoma, pheochromocytoma, and medullary **thyroid carcinoma**. On the other hand, the RET gene codes for a transmembrane tyrosine kinase and is responsible for the development of multiple endocrine **neoplasia** (MEN) 2A and 2B. To explore the potential role of **LAR** in RET tyrosine kinase activity and RET-induced signal transduction, we cotransfected **LAR** and RET with a MEN2A or MEN2B mutation (designated RET-MEN2A or RET-MEN2B) into the NIH 3T3 cell line. Here we show that **LAR** reduces the constitutive tyrosine autophosphorylation and kinase activity of RET-MEN2A but not RET-MEN2B, accompanying a significant decrease of phosphorylation of phospholipase Cgamma, AKT, and ERK1/2. Interestingly, **LAR** expression significantly decreased the levels of disulfide-linked RET-MEN2A dimerization. Moreover, reduced oncogenic activity of RET-MEN2A by overexpression of **LAR** was observed both by an in vitro colony formation assay and by in vivo **tumorigenicity** in scid mice. These results thus suggest that **LAR** may contribute to deactivation of the RET-MEN2A mutant protein and reduction of its oncogenic activity in vivo.
IT Major Concepts
Biochemistry and Molecular Biophysics; Cell Biology; Genetics
IT Chemicals & Biochemicals
RET-MEN2A mutant protein: biochemical activities, biological activities; RET-MEN2B mutant protein: biochemical activities, biological activities; human **LAR** complementary DNA fragment; **leukocyte** common antigen-related protein
IT Methods & Equipment
GST fusion protein binding assay: analytical method; Western blot analysis: detection/labeling techniques, gene mapping; immunoprecipitation: precipitation techniques; in vitro RET receptor tyrosine kinase assay: analytical method, enzymatic protocols
ORGN Super Taxa
Muridae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
NIH3T3 cell line (Muridae): murine embryo fibroblasts
ORGN Organism Superterms
Animals; Chordates; Mammals; Nonhuman Mammals; Nonhuman Vertebrates; Rodents; Vertebrates
IT Major Concepts
Biochemistry and Molecular Biophysics; Cell Biology; Genetics
IT Chemicals & Biochemicals

RET-MEN2A mutant protein: biochemical activities, biological activities; RET-MEN2B mutant protein: biochemical activities, biological activities; human **LAR** complementary DNA fragment; **leukocyte** common antigen-related protein

L28 ANSWER 2 OF 19 MEDLINE
AN 2001227383 MEDLINE
DN 21135493 PubMed ID: 11241288
TI Within the hemopoietic system, **LAR** phosphatase is a T cell lineage-specific adhesion receptor-like protein whose phosphatase activity appears dispensable for T cell development, repertoire selection and function.
AU Terszowski G; Jankowski A; Hendriks W J; Rolink A G; Kisielow P
CS Basel Institute for Immunology, Basel, Switzerland.
SO EUROPEAN JOURNAL OF IMMUNOLOGY, (2001 Mar) 31 (3) 832-40.
Journal code: EN5; 1273201. ISSN: 0014-2980.
CY Germany: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-AF300943
EM 200104
ED Entered STN: 20010502
Last Updated on STN: 20010502
Entered PubMed: 20010312
Entered Medline: 20010426
AB Expression of the receptor-type tyrosine phosphatase **LAR** was studied in cells of the murine hemopoietic system. The gene is expressed in all cells of the T cell lineage but not in cells of any other hemopoietic lineage and the level of expression in T cells is developmentally regulated. The CD4(-)8(-)44(+) early thymic immigrants and mature (CD4(+)8(-)/CD4(-)8(+)) thymocytes and T cells express low levels, whereas immature (CD4(-)8(-)44(-) and CD4(+)8(+)) thymocytes express high levels of **LAR**. Among bone marrow cells only uncommitted c-kit(+)B220(+)CD19(-) precursors, but not B cell lineage committed c-kit(+)B220(+)CD19(+) precursors, express low levels of **LAR**. In contrast to the c-kit(+)B220(+)CD19(+) pre-BI cells from normal mice, counterparts of pre-BI cells from PAX-5-deficient mice express **LAR** , indicating that PAX-5-mediated commitment to the B cell lineage results in suppression of **LAR**. During differentiation of PAX-5-deficient pre-BI cell line into non-T cell lineages, expression of **LAR** is switched off, but it is up-regulated during differentiation into thymocytes. Thus, within the hemopoietic system, **LAR** appears to be a T cell lineage-specific receptor-type phosphatase. However, surprisingly, truncation of its phosphatase domains has no obvious effect on T cell development, repertoire selection or function.
CT Check Tags: Animal; Support, Non-U.S. Gov't
Amino Acid Sequence
Antibodies, Monoclonal: IM, immunology
Bone Marrow Cells: IM, immunology
Cell Lineage
Cells, Cultured
Clone Cells
Cloning, Molecular
Mice

Mice, Mutant Strains
Molecular Sequence Data
Precipitin Tests
Protein Structure, Tertiary
Protein-Tyrosine-Phosphatase: BI, biosynthesis
Protein-Tyrosine-Phosphatase: GE, genetics
Protein-Tyrosine-Phosphatase: PH, physiology
RNA, Messenger: BI, biosynthesis
Receptors, Antigen, T-Cell, alpha-beta: AN, analysis
Receptors, Cell Surface: BI, biosynthesis
*Receptors, Cell Surface: GE, genetics
*Receptors, Cell Surface: PH, physiology
Sequence Deletion
*T-Lymphocytes: EN, enzymology
*T-Lymphocytes: IM, immunology
Thymus Gland: IM, immunology

L28 ANSWER 3 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS
AN 2000:325245 BIOSIS
DN PREV200000325245
TI Detection of CD45iota mRNA in murine Th1 but not Th2 clones.
AU Tsujikawa, Kazutake (1); Uchino, Yukiko; Ichijo, Tomoko; Furukawa, Tatsuhiko; Yamamoto, Hiroshi
CS (1) Department of Immunology, Graduate School of Pharmaceutical Sciences, Osaka University, 1-6 Yamadaoka, Suita, Osaka, 565-0871 Japan
SO Immunobiology, (April, 2000) Vol. 201, No. 5, pp. 506-514. print. ISSN: 0171-2985.
DT Article
LA English
SL English
AB CD45, a prototype of the receptor-like protein tyrosine **phosphatase** (PTPase) family, is one of the essential molecules in signal transduction through T cell receptors. Because at least 8 types of CD45 isoforms can potentially be produced by alternative mRNA splicing of exons 4, 5, and 6, the analyses at the transcription and protein levels of CD45 during the development and differentiation of T cells have been performed using RT-PCR and isoform-specific **monoclonal antibodies**, respectively. We report here that the ninth and smallest isoform of CD45, designated as CD45iota (CD45iota), which is alternatively spiced from exons 4, 5, and 6 as well as exon 7, is present in the fetal thymus and splenic T cells of mice, and in murine Th1 clones, but not in Th2 clones. The expression of full-length CD45iota mRNA as the functional CD45 PTPase was confirmed by RT-PCR analysis. Furthermore, the expression vector of CD45iota was constructed, and its expression was detected in combination with anti-pan CD45 mAb and our newly established anti-**LAR**/CD45 PTPase domain mAb. These results suggested that CD45iota might be an important isoform of CD45 for differentiation signaling of Th cells, and might be used as a marker to distinguish between Th1 and Th2 cells.
IT Major Concepts
Immune System (Chemical Coordination and Homeostasis)
IT Parts, Structures, & Systems of Organisms
T helper cell type 1: immune system; T helper cell type 2: immune system; thymus: blood and lymphatics, endocrine system, immune system
IT Chemicals & Biochemicals

CD45iota messenger RNA: detection
IT Miscellaneous Descriptors
signal transduction
ORGN Super Taxa
Cercopithecidae: Primates, Mammalia, Vertebrata, Chordata, Animalia; Muridae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
COS-7 cell line (Cercopithecidae); mouse (Muridae)
ORGN Organism Superterms
Animals; Chordates; Mammals; Nonhuman Mammals; Nonhuman Primates; Nonhuman Vertebrates; Primates; Rodents; Vertebrates
IT Major Concepts
Immune System (Chemical Coordination and Homeostasis)
IT Parts, Structures, & Systems of Organisms
T helper cell type 1: immune system; T helper cell type 2: immune system; thymus: blood and lymphatics, endocrine system, immune system
IT Chemicals & Biochemicals
CD45iota messenger RNA: detection

L28 ANSWER 4 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS
AN 2000:484997 BIOSIS
DN PREV200000484997
TI Occurrence and effects of octreotide antibodies during nasal, subcutaneous and slow release intramuscular treatment.
AU Kaal, Andreas (1); Orskov, Hans; Nielsen, Steen; Pedroncelli, Alberto M.; Lancranjan, Ioana; Marbach, Peter; Weeke, Jorgen
CS (1) Medical Research Laboratories, Aarhus Kommune Hospital, Norrebrogade 44, DK-8000, Aarhus C Denmark
SO European Journal of Endocrinology, (September, 2000) Vol. 143, No. 3, pp. 353-361. print.
ISSN: 0804-4643.
DT Article
LA English
SL English
AB Objective: Previous studies have indicated that **antibody** formation against octreotide in extremely rare. We examined the occurrence of octreotide **antibody** formation after treatment with three administration forms in large populations of patients with acromegaly or carcinoid syndrome. Design: (i) Nasally administered octreotide: 70 previously untreated patients and 81 previously s.c. octreotide-treated patients participated. (ii) Subcutaneously administered octreotide: 172 acromegalic patients and 59 patients with carcinoid syndrome treated for up to 12 years participated. (iii) Intramuscularly administered depot octreotide (Sandostatin **LAR**): 62 acromegalic patients participated. Methods: Presence of **antibodies** is defined as increased precipitation by polyethylene glycol of 125I-octreotide after incubation with serum: this was also used for screening of cross-reaction with somatostatin and lanreotide (Somatuline). Results: In patients who received nasal octreotide for at least 9 and up to 12 months (n = 42), the occurrence of octreotide **antibodies** was 77% and 81% for previously untreated and treated patients respectively. In subcutaneously treated patients it was 63/231 (27%) after a mean exposure of 3 years. In patients treated for more than 5 years (n = 53) it was 57% and after 8 years (n = 18) 72%. In contrast, no patient could with certainty be

identified to be **antibody**-positive after a mean of 2.5 years intramuscular Sandostatin **LAR** treatment (n = 47). In all populations, the **antibody**-positive patients were as well controlled as the **antibody**-negative patients. Octreotide **antibodies** did not cross-react with native somatostatin (n = 141), while about 25% of the **antibody**-positive sera did cross-react with the somatostatin analogue, lanreotide (Somatuline, Ipstyl, Angiopeptin). Conclusions: **Antibody** formation against octreotide is much more frequent than previously believed. It depends primarily on drug exposure time and route of administration. It does not alter the GH/IGF-I status in treated acromegalic patients and induces only mild local reactions in some patients.

IT Major Concepts
Clinical Endocrinology (Human Medicine, Medical Sciences); Pharmacology
IT Diseases
acromegaly: bone disease, endocrine disease/pituitary, treatment; carcinoid syndrome: endocrine disease, **neoplastic** disease, treatment
IT Chemicals & Biochemicals
iodine-125-labeled octreotide; lanreotide: somatostatin analogue; octreotide: efficacy, hormone - drug, nasal administration, side effects, slow release formulation, subcutaneous administration; octreotide antibodies: formation, occurrence; polyethylene glycol; sandostatin: efficacy, hormone - drug, intramuscular administration, side effects, slow release formulation; somatostatin
IT Alternate Indexing
Acromegaly (MeSH)
ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
human (Hominidae): patient
ORGN Organism Superterms
Animals; Chordates; Humans; Mammals; Primates; Vertebrates
RN 108736-35-2 (LANREOTIDE)
83150-76-9 (OCTREOTIDE)
25322-68-3 (POLYETHYLENE GLYCOL)
79517-01-4 (SANDOSTATIN)
38916-34-6Q (SOMATOSTATIN)
51110-01-1Q (SOMATOSTATIN)
IT Major Concepts
Clinical Endocrinology (Human Medicine, Medical Sciences); Pharmacology
IT Diseases
acromegaly: bone disease, endocrine disease/pituitary, treatment; carcinoid syndrome: endocrine disease, **neoplastic** disease, treatment
IT Chemicals & Biochemicals
iodine-125-labeled octreotide; lanreotide: somatostatin analogue; octreotide: efficacy, hormone - drug, nasal administration, side effects, slow release formulation, subcutaneous administration; octreotide antibodies: formation, occurrence; polyethylene glycol; sandostatin: efficacy, hormone - drug, intramuscular administration, side effects, slow release formulation; somatostatin
IT Alternate Indexing
Acromegaly (MeSH)

L28 ANSWER 5 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 1
AN 1999:233767 BIOSIS
DN PREV199900233767
TI Selectin blockade prevents antigen-induced late bronchial responses and airway hyperresponsiveness in allergic sheep.
AU Abraham, William M. (1); Ahmed, Ashfaq; Sabater, Juan R.; Lauredo, Isabel T.; Botvinnikova, Yelena; Bjercke, Robert J.; Hu, X.; Revelle, B. Mitch; Kogan, Timothy P.; Scott, Ian L.; Dixon, Richard A. F.; Yeh, Edward T. H.; Beck, Pamela J.
CS (1) Department of Research, University of Miami at Mt. Sinai Medical Center, 4300 Alton Rd., Miami Beach, FL, 33140 USA
SO American Journal of Respiratory and Critical Care Medicine, (April, 1999) Vol. 159, No. 4 PART 1, pp. 1205-1214. ISSN: 1073-449X.
DT Article
LA English
SL English
AB Antigen challenge can elicit an allergic inflammatory response in the airways that involves eosinophils, basophils, and neutrophils and that is expressed physiologically as a late airway response (**LAR**) and airway hyperresponsiveness (AHR). Although previous studies have suggested that E-selectin participates in these allergic airway responses, there is little information concerning the role of L-selectin. To address this question, we examined the effects of administering an L-selectin-specific **monoclonal antibody**, DU1-29, as well as three small molecule selectin binding inhibitors, on the development of early airway responses (EAR), **LAR** and AHR in allergic sheep undergoing airway challenge with Ascaris suum antigen. Sheep treated with aerosol DU1-29 before antigen challenge had a significantly reduced **LAR** and did not develop postchallenge AHR. No protective effect was seen when sheep were treated with a nonspecific control **monoclonal antibody**. Treatment with DU1-29 also reduced the severity of the EAR to antigen. Similar results were obtained with each of the three small molecule selectin inhibitors at doses that depended on their L-, but not necessarily E-selectin inhibitory capacity. The inhibition of the EAR with one of the inhibitors, TBC-1269, was associated with a reduction in histamine release. Likewise, treatment with TBC-1269 reduced the number of neutrophils recovered in bronchoalveolar lavage (BAL) during the time of **LAR** and AHR. TBC-1269, given 90 min after antigen challenge also blocked the **LAR** and the AHR, but this protection was lost if the treatment was withheld until 4 h after challenge, a result consistent with the proposed time course of L-selectin involvement in **leukocyte** trafficking. These are the first data indicating that L-selectin may have a unique cellular function that modulates allergen-induced pulmonary responses.
IT Major Concepts
Immune System (Chemical Coordination and Homeostasis); Respiratory System (Respiration)
IT Diseases
airway hyperresponsiveness: immune system disease, respiratory system disease; antigen-induced late bronchial responses: immune system

disease, respiratory system disease; late airway response: immune system disease, respiratory system disease

IT Chemicals & Biochemicals
selectin: blockade; L-selectin

IT Miscellaneous Descriptors
allergic inflammatory response; pulmonary response: allergen-induced, modulation

ORGN Super Taxa
Bovidae: Artiodactyla, Mammalia, Vertebrata, Chordata, Animalia

ORGN Organism Name
sheep (Bovidae): allergic

ORGN Organism Superterms
Animals; Artiodactyls; Chordates; Mammals; Nonhuman Mammals; Nonhuman Vertebrates; Vertebrates

IT Major Concepts
Immune System (Chemical Coordination and Homeostasis); Respiratory System (Respiration)

IT Diseases
airway hyperresponsiveness: immune system disease, respiratory system disease; antigen-induced late bronchial responses: immune system disease, respiratory system disease; late airway response: immune system disease, respiratory system disease

IT Chemicals & Biochemicals
selectin: blockade; L-selectin

L28 ANSWER 6 OF 19 MEDLINE
AN 1999387186 MEDLINE
DN 99387186 PubMed ID: 10455428
TI A role for intracellular immunization in chemosensitization of tumor cells?.
AU Pich A; Rancourt C
CS Departement de Microbiologie, Faculte de Medecine, Universite de Sherbrooke, 3001 12ieme Avenue Nord, Sherbrooke, Quebec, Canada J1H 5N4.
SO GENE THERAPY, (1999 Jul) 6 (7) 1202-9. Ref: 119
Journal code: CCE; 9421525. ISSN: 0969-7128.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LA English
FS Priority Journals
EM 200002
ED Entered STN: 20000309
Last Updated on STN: 20000309
Entered Medline: 20000224
AB Acquired drug resistance represents a major cause of chemotherapy failure in patients with cancer. The characterization of the molecular pathways involved in drug resistance has provided us with new targets to overcome this problem. Many of these target proteins are often overexpressed in human cancers. A number of gene therapy strategies, including antisense oligonucleotides, ribozymes and single-chain antibodies, have been developed to achieve the selective modulation and inhibition of various cellu- **lar** proteins. Thus, these approaches can be exploited to modulate the resistance phenotype of tumor cells. These gene therapy strategies represent a novel and unique way to enhance the sensitivity of tumor cells to chemotherapeutic drugs. This review will focus on the use of intracellular immunization as a means to modulate the expression of

specific genetic determinants involved in the drug resistance phenotype.
CT Check Tags: Human; Support, Non-U.S. Gov't
***Antibodies, Monoclonal: AD, administration & dosage**
Apoptosis
*Drug Resistance, Neoplasm
*Gene Therapy
*Immunization, Passive
Intracellular Fluid: IM, immunology
Neoplasms: GE, genetics
*Neoplasms: TH, therapy
Oligonucleotides, Antisense
RNA, Catalytic

L28 ANSWER 7 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1999:203662 BIOSIS
DN PREV199900203662
TI Enhanced expression of a transmembrane phosphotyrosine **phosphatase** (**LAR**) in keratoconus cultures and corneas.
AU Chiplunkar, Sujata; Chamblis, Kim; Chwa, Marilyn; Rosenberg, Shari; Kenney, M. Cristina; Brown, Donald J. (1)
CS (1) Ophthalmology Research, Cedars-Sinai Medical Center, D-5069, Los Angeles, CA, 90048 USA
SO Experimental Eye Research, (March, 1999) Vol. 68, No. 3, pp. 283-293. ISSN: 0014-4835.
DT Article
LA English
SL English
AB The purpose of the study was to identify genes that are differentially expressed in normal versus keratoconus corneas. Total RNA isolated from corneal stromal cell cultures was reverse-transcribed and then amplified by the polymerase chain reaction (PCR) using defined, arbitrary primers. The products were displayed on polyacrylamide gels and bands that were differentially expressed were excised, re-amplified and subcloned. The resulting clones were sequenced and utilized as probes for Northern blots with cultured cell RNA or Southern blots of corneal cDNA. One of the products that appeared to be more highly expressed in keratoconus cultures and corneas displayed 100% homology with **leukocyte** common antigen related protein (**LAR**), a transmembrane phosphotyrosine **phosphatase**. Western analyses and immunohistochemistry with **monoclonal** and/or polyclonal **antibodies** to **LAR** were used to examine keratocyte cultures and fresh frozen normal, keratoconus and pseudophakic bullous corneas. We identified a gene product with 100% homology to **LAR** that is expressed at the RNA level in keratoconus corneas and cell cultures but is found only at low or undetectable levels in normal cultures and normal and pseudophakic bullous keratopathy (PBK) corneas. By Western blotting and immunofluorescence with specific **LAR antibodies**, the protein was identified in keratoconus stromal cell cultures but not in normal cultures. When fresh frozen tissue was examined, **LAR** protein was localized to numerous stromal cells throughout central keratoconus corneas, while no central staining was seen in normal or bullous keratopathy corneas. **LAR**, a transmembrane phosphotyrosine **phosphatase**, is more highly expressed in keratoconus corneas and stromal cell cultures as

demonstrated by differential display, Northern analyses, immunohistochemistry and Western blotting.

IT Major Concepts
Enzymology (Biochemistry and Molecular Biophysics); Molecular Genetics (Biochemistry and Molecular Biophysics); Sense Organs (Sensory Reception)

IT Parts, Structures, & Systems of Organisms
cornea: sensory system; keratocytes: sensory system

IT Diseases
bullous keratopathy: eye disease; keratoconus: eye disease; pseudophakic bullous cornea: eye disease

IT Chemicals & Biochemicals
cDNA [complementary DNA]; **leukocyte** common antigen related protein: expression, transmembrane phosphotyrosine **phosphatase**; RNA

IT Alternate Indexing
Keratoconus (MeSH)

IT Methods & Equipment
Northern blot: genetic method; PCR [polymerase chain reaction]: genetic method; Southern blot: genetic method; Western analysis: genetic method

IT Miscellaneous Descriptors
gene expression

ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGN Organism Name
human (Hominidae)

ORGN Organism Superterms
Animals; Chordates; Humans; Mammals; Primates; Vertebrates

RN 79747-53-8 (PHOSPHOTYROSINE **PHOSPHATASE**)

IT Major Concepts
Enzymology (Biochemistry and Molecular Biophysics); Molecular Genetics (Biochemistry and Molecular Biophysics); Sense Organs (Sensory Reception)

IT Parts, Structures, & Systems of Organisms
cornea: sensory system; keratocytes: sensory system

IT Diseases
bullous keratopathy: eye disease; keratoconus: eye disease; pseudophakic bullous cornea: eye disease

IT Chemicals & Biochemicals
cDNA [complementary DNA]; **leukocyte** common antigen related protein: expression, transmembrane phosphotyrosine **phosphatase**; RNA

IT Alternate Indexing
Keratoconus (MeSH)

L28 ANSWER 8 OF 19 MEDLINE
AN 97351851 MEDLINE
DN 97351851 PubMed ID: 9208133
TI The effect of R 15.7/HO, an anti-CD18 antibody, on the late airway response and airway hyperresponsiveness in an allergic rabbit model.
AU el-Hashim A Z; Jacques C A; Herd C M; Lee T H; Page C P
CS Sackler Institute of Pulmonary Pharmacology, King's College, University of London.
SO BRITISH JOURNAL OF PHARMACOLOGY, (1997 Jun) 121 (4) 671-8.

Journal code: B00; 7502536. ISSN: 0007-1188.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199709
ED Entered STN: 19971008
Last Updated on STN: 19971008
Entered Medline: 19970925

AB 1. The effects of a mouse (IgG1 fraction) anti-CD 18 neutralizing antibody (R15.7) on allergen-induced late airway response (**LAR**), airway hyperresponsiveness (AHR) and cellular recruitment were investigated in an allergic rabbit model. 2. Litter-matched NZW rabbits immunized within 24 h of birth with Alternaria tenuis (i.p.) and subsequently exposed to the allergen (i.p.) for the first 3 months of life were challenged with inhaled allergen as adult rabbits. Lung function in terms of dynamic compliance (Cdyn; ml cmH2O-1) and total lung resistance (RL; cmH2O-1 s-1) was monitored for 6 h following the allergen challenge. On day 16, separate groups of rabbits were pretreated with either control antibody (a non-binding mouse IgG1, 1 mg kg-1, i.v.) or R15.7 (1 mg kg-1, i.v.) and 1 h later all were challenged with Alternaria tenuis and lung function monitored thereafter. Airway responsiveness to inhaled histamine was assessed by measuring RL and Cdyn 24 h before and after allergen challenge and bronchoalveolar lavage (BAL) was also performed 24 h before and after allergen challenge. 3. Pretreatment of rabbits with the control antibody had no effect on the **LAR** as measured by AUC (Cdyn, 0-6 h). However, the magnitude of the **LAR** following treatment with R15.7 was significantly reduced when compared to **LAR** demonstrated on 1st challenge ($P < 0.001$) or to that of the control group on both challenges ($P < 0.01$). 4. In control antibody pretreated rabbits allergen induced a significant 3.4 fold reduction in the PC50 response to inhaled histamine in terms of RL changes ($P < 0.05$) and a significant 2.1 fold reduction in PC35 response to inhaled histamine in terms of Cdyn changes ($P < 0.05$). However, in anti-CD 18 antibody pretreated rabbits there was no significant change in responsiveness to histamine 24 h following allergen, as assessed by either RL PC50 or Cdyn PC35. 5. Allergen challenge induced a significant increase in eosinophil and neutrophil numbers ($P < 0.05$) in rabbits pre-treated with control antibody, whereas treatment with R15.7 significantly inhibited this increase in the numbers of both cell types. 6. This study demonstrates that the neutralization of CD-18 molecules reduces allergen-induced infiltration of both eosinophils and neutrophils into the airways and abolishes the accompanying **LAR** and AHR. These results provide evidence to support a role for CD-18 adhesion molecules in the transmigration of inflammatory cells into airways.

CT Check Tags: Animal; Support, Non-U.S. Gov't
Alternaria: IM, immunology
Alternaria: ME, metabolism
***Antibodies, Monoclonal: PD, pharmacology**
*Antigens, CD18: IM, immunology
Antigens, CD18: ME, metabolism
Asthma: IM, immunology

Asthma: PP, physiopathology
Bronchoalveolar Lavage
Disease Models, Animal
*Histamine: PD, pharmacology
Inflammation
Rabbits
*Respiratory Hypersensitivity: IM, immunology

L28 ANSWER 9 OF 19 MEDLINE
AN 97219216 MEDLINE
DN 97219216 PubMed ID: 9066516
TI A monoclonal antibody against very late activation antigen-4 inhibits eosinophil accumulation and late asthmatic response in a guinea pig model of asthma.
AU Sagara H; Matsuda H; Wada N; Yagita H; Fukuda T; Okumura K; Makino S; Ra C
CS Department of Immunology, Juntendo University School of Medicine, Tokyo, Japan.
SO INTERNATIONAL ARCHIVES OF ALLERGY AND IMMUNOLOGY, (1997 Mar) 112 (3) 287-94.
Journal code: BJ7; 9211652. ISSN: 1018-2438.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199703
ED Entered STN: 19970414
Last Updated on STN: 19970414
Entered Medline: 19970328
AB Preferential eosinophil accumulation is a characteristic of airway inflammation in asthma. Although little is known about its mechanism, recent in vitro observations suggest that the very late activation antigen-4 (VLA-4, CD49d/CD29) and vascular cell adhesion molecule-1 (VCAM-1) adhesion pathway may be involved in specific eosinophil migration. To test this hypothesis, we studied the effect of an anti-VLA-4 monoclonal antibody (mAb) on the airway eosinophilia in a guinea pig model of asthma. Guinea pigs were sensitized by repeated inhalation of ovalbumin. After a single inhalation challenge, the animals showed a striking airway eosinophilia and late asthmatic response (**LAR**). In contrast, when guinea pigs were pretreated intravenously at 2 h before antigen challenge with a rat antimouse VLA-4 mAb, PS2/3, cross-reacting with guinea pig eosinophils and lymphocytes, eosinophil, basophil and lymphocyte infiltration in the tracheal wall was significantly inhibited as well as **LAR** in a dose-dependent manner. These results suggest that VLA-4 plays a critical role in antigen-induced airway eosinophilia and **LAR**.
CT Check Tags: Animal; Male; Support, Non-U.S. Gov't
***Antibodies, Monoclonal: TU, therapeutic use**
*Asthma: IM, immunology
Asthma: PC, prevention & control
Cell Adhesion: IM, immunology
Cell Movement: IM, immunology
Cross Reactions
Disease Models, Animal
Endothelium, Vascular: CY, cytology

Eosinophils: CY, cytology
Flow Cytometry: MT, methods
Fluorescent Antibody Technique
Guinea Pigs
Immunoblotting
*Integrins: IM, immunology
Precipitin Tests
*Receptors, Lymphocyte Homing: IM, immunology
Vascular Cell Adhesion Molecule-1: PH, physiology

L28 ANSWER 10 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1996:291522 BIOSIS
DN PREV199699013878
TI Expression of **LAR**-PTP2 in rat lung is confined to proliferating epithelia lining the airways and air sacs.
AU Kim, Hyeja; Yeger, Herman; Han, Robin; Wallace, Megan; Goldstein, Barry; Rotin, Daniela
CS Respiratory Res. Div., Hosp. Sick Children, 555 University Ave., Toronto, ON M5G 1X8 Canada
SO American Journal of Physiology, (1996) Vol. 270, No. 4 PART 1, pp. L566-L576.
ISSN: 0002-9513.
DT Article
LA English
AB The **LAR** family tyrosine **phosphatase LAR**
-PTP2B (RPTP-sigma) was previously shown to be expressed in the central and peripheral nervous system. Here we show that **LAR**-PTP2, the larger alternatively spliced form of the gene, is expressed in proliferating undifferentiated lung epithelia in a developmentally regulated manner. Using in situ **hybridization** and parallel immunostaining with proliferating cell nuclear antigen to detect proliferating cells, we demonstrate that **LAR**-PTP2 is expressed exclusively in the undifferentiated epithelial cell layer lining the bronchi, bronchioles, and air sacs in late fetal development and in the neonatal lung. These cells correspond to Clara and fetal alveolar type II cells, as determined by parallel immunostaining with **antibodies** to surfactant proteins A and B. **LAR**-PTP2 expression declined progressively with postnatal development, and by adult stage there was no detectable expression in the airways or in the distal (type I and II) mature nonproliferating alveolar epithelial cells. These results suggest that **LAR**-PTP2 may be involved in the regulation of epithelial cell proliferation/differentiation during lung development.
IT Major Concepts
Cell Biology; Development; Metabolism; Respiratory System (Respiration)
IT Miscellaneous Descriptors
LUNG DEVELOPMENT; TYROSINE **PHOSPHATASE**
ORGN Super Taxa
Muridae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
Muridae (Muridae)
ORGN Organism Superterms
animals; chordates; mammals; nonhuman vertebrates; nonhuman mammals; rodents; vertebrates
IT Major Concepts
Cell Biology; Development; Metabolism; Respiratory System (Respiration)

L28 ANSWER 11 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1996:81734 BIOSIS
DN PREV199698653869
TI Effect of Saiboku-to (Chai-Pu-Tang), a traditional herbal medicine, on the expression of **tumor** necrosis factor during late asthmatic response in guinea-pigs.
AU Tanno, Y.; Zhu, D.; Maeda, K.; Iijima, H.; Ohno, I.; Pan, L.-H.; Ohtani, H.; Nagura, H.; Shirato, K. (1)
CS (1) First Dep. Internal Med., Tohoku Univ. Sch. Med., 1-1 Seiryo-machi, Aoba-ku, Sendai 980 Japan
SO International Journal of Immunopharmacology, (1995) Vol. 17, No. 11, pp. 923-930.
ISSN: 0192-0561.
DT Article
LA English
AB Saiboku-to (TJ-96) has been used orally for the prophylactic treatment of bronchial asthma including chronic, severe and steroid-dependent types. In this experiment we examined the effect of this remedy on the late asthmatic response (**LAR**) and the expression of TNF-alpha in a guinea-pig asthmatic model. Approximately 3-week-old male Hartley strain guinea-pigs were immunized with a mixture of ascaris suum extract and silica gel and challenged with inhalation of the antigen, by which a dual asthmatic response was developed. TJ-96 was administered 500 mg/kg/day (corresponding to the maximum clinical dose) for 14 days before the challenge using a gastric tube. Lung tissues were fixed in periodate-lysine-paraformaldehyde. The enzyme linked indirect immunoperoxidase method was applied on 3 mu-m thick sections. The **antibodies** used were anti-human TNF-alpha polyclonal rabbit IgG. TJ-96 significantly suppressed the **LAR** and the infiltration of eosinophils and mast cells in the lung. The immunohistochemistry revealed that this cytokine was strongly expressed in mast cells, macrophages and bronchial epithelial cells of the lung tissues from asthmatic guinea-pigs with **LAR**, while its expression was reduced in the TJ-96 treatment group in which **LAR** was suppressed..
IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Cell Biology; Endocrine System (Chemical Coordination and Homeostasis); Immune System (Chemical Coordination and Homeostasis); Pathology; Pharmacology; Respiratory System (Respiration)
IT Miscellaneous Descriptors
ANTIASTHMATIC-DRUG; EOSINOPHIL; MAST CELL; PROPHYLAXIS; SAIBOKU-TO
ORGN Super Taxa
Caviidae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
Caviidae (Caviidae)
ORGN Organism Superterms
animals; chordates; mammals; nonhuman vertebrates; nonhuman mammals; rodents; vertebrates
IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Cell Biology; Endocrine System (Chemical Coordination and Homeostasis); Immune System (Chemical Coordination and Homeostasis); Pathology; Pharmacology;

Respiratory System (Respiration)

L28 ANSWER 12 OF 19 MEDLINE
AN 95347750 MEDLINE
DN 95347750 PubMed ID: 7622177
TI Antibody against interleukin-5 prevents antigen-induced eosinophil infiltration and bronchial hyperreactivity in the guinea pig airways.
AU Akutsu I; Kojima T; Kariyone A; Fukuda T; Makino S; Takatsu K
CS Department of Immunology, University of Tokyo, Japan.
SO IMMUNOLOGY LETTERS, (1995 Feb) 45 (1-2) 109-16.
Journal code: GIH; 7910006. ISSN: 0165-2478.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199508
ED Entered STN: 19950911
Last Updated on STN: 19950911
Entered Medline: 19950829
AB Interleukin-5 (IL-5) induces proliferation, differentiation and activation of eosinophils. An animal model of local allergen (airways) sensitization was employed to study the effects of anti-IL-5 monoclonal antibody (mAb) on infiltration of eosinophils into inflammatory region, the development of antigen-induced late asthmatic response (**LAR**) and the increased bronchial responsiveness following **LAR**. Guinea pigs exposed to aerosolized ovalbumin (OVA) daily for 10 days developed an increase in the number of eosinophils in the tracheal wall 24 h after aerosolized OVA challenge. Furthermore, all animals developed an apparent **LAR** determined by the response with a 2-fold increase in respiratory resistance and showed an increase in bronchial responsiveness to acetylcholine 24 h after OVA challenge. In animals treated with anti-IL-5 mAb, however, eosinophil number in the tracheal wall dramatically decreased compared with animals treated with control antibody. The development of **LAR** was also remarkably suppressed by anti-IL-5 mAb treatment, although a similar magnitude of immediate bronchoconstriction was observed. Moreover, in anti-IL-5 antibody-treated guinea pigs, an increase in bronchial responsiveness to acetylcholine significantly decreased. Data demonstrate that IL-5 is involved in airway eosinophilia, development of **LAR** and an increase in bronchial responsiveness induced by allergen sensitization via the airways. Development of IL-5 synthesis inhibitors and/or receptor antagonists could provide another therapeutic class of anti-asthmatic drugs.
CT Check Tags: Animal; Male; Support, Non-U.S. Gov't
Acetylcholine: DU, diagnostic use
Acetylcholine: PD, pharmacology
Aerosols
Antibodies, Monoclonal: IM, immunology
Antibodies, Monoclonal: PD, pharmacology
***Antibodies, Monoclonal: TU, therapeutic use**
*Asthma: CO, complications
Asthma: IM, immunology
Asthma: PP, physiopathology
Bronchial Hyperreactivity: ET, etiology
*Bronchial Hyperreactivity: PC, prevention & control
Bronchial Provocation Tests

Bronchoconstriction: DE, drug effects
Eosinophilia: ET, etiology
*Eosinophilia: PC, prevention & control
Guinea Pigs
*Interleukin-5: AI, antagonists & inhibitors
Interleukin-5: IM, immunology
Leukocyte Count
Lung: PA, pathology
Ovalbumin: AD, administration & dosage
Ovalbumin: DU, diagnostic use
Ovalbumin: IM, immunology
Specific Pathogen-Free Organisms
Trachea: PA, pathology

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L28 ANSWER 13 OF 19 MEDLINE
AN 96156581 MEDLINE
DN 96156581 PubMed ID: 8581346
TI Role of eosinophils and cell adhesion molecules in the allergen-induced asthmatic response of rats.
AU Uyama O; Ihaku D; Kitada O; Miyasaka M; Sugita M
CS Division of Pathobiology, College of Nursing Art and Science Hyogo, Akashi, Japan.
SO RESEARCH COMMUNICATIONS IN MOLECULAR PATHOLOGY AND PHARMACOLOGY, (1995 Oct) 90 (1) 3-15.
Journal code: B2X; 9437512. ISSN: 1078-0297.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199603
ED Entered STN: 19960327
Last Updated on STN: 19960327
Entered Medline: 19960321
AB To evaluate the airway infiltration of eosinophils in the asthmatic responses of Brown-Norway rats, which were sensitized with ovalbumin, the time course of eosinophil infiltration and respiratory resistance (Rrs) after ovalbumin challenge was measured. The effect of treatment with monoclonal antibody against ICAM-1 and CD18 was studied. Finally, the expression of ICAM-1 and CD18 in the airway was investigated. All rats showed Rrs increase 6-7 hours after ovalbumin challenge, indicating a late asthmatic response (**LAR**). Animals with **LAR** had higher eosinophil counts than those with an immediate asthmatic response (IAR) and in the sensitized but nonchallenged animals. Rats treated with the antibodies showed significantly smaller increases in Rrs and lower eosinophil counts than the control animals. Immunohistochemical staining in airway was performed. ICAM-1 immunoreactivity was positive on both the epithelium and the vascular endothelium of a trachea section, and on the pulmonary vascular endothelium. ICAM-1 expression was upregulated after challenge. The number of CD18-positive cells in sections of trachea and lung increased after challenge. Our results show that eosinophil infiltration is important in **LAR** development and the treatment with antagonists of ICAM-1 and CD18 may provide a therapeutic approach to reducing asthmatic symptoms.
CT Check Tags: Animal; Male
Aerosols
Airway Resistance: DE, drug effects
Airway Resistance: PH, physiology
*Allergens: IM, immunology
Antibodies, Monoclonal: DU, diagnostic use
Antigens, CD18: IM, immunology
Asthma: CI, chemically induced
*Asthma: IM, immunology
Cell Adhesion Molecules: IM, immunology
*Cell Adhesion Molecules: PH, physiology
*Eosinophils: IM, immunology
Immunohistochemistry
Ovalbumin: AD, administration & dosage

Ovalbumin: IM, immunology
Rats
Rats, Inbred BN
Up-Regulation (Physiology)

L28 ANSWER 14 OF 19 MEDLINE
AN 93371402 MEDLINE
DN 93371402 PubMed ID: 8363598
TI Unique preS sequence in a gibbon-derived hepatitis B virus variant.
AU Mimms L T; Solomon L R; Ebert J W; Fields H
CS Abbott Laboratories, North Chicago, IL 60064.
SO BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1993 Aug 31) 195 (1) 186-91.
Journal code: 9Y8; 0372516. ISSN: 0006-291X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199309
ED Entered STN: 19931015
Last Updated on STN: 19980206
Entered Medline: 19930928
AB A unique hepatitis B virus (HBV) variant has been identified in a gibbon (Hylobates **lar**) which could be passed to a chimpanzee by experimental inoculation. This HBV variant had been shown to have no reactivity to a monoclonal anti-preS2 antibody (preS2 mAb 116-34) differentiating it from all human HBV specimens tested. This gibbon sera also was not recognized by an anti-preS1 mAb which binds the preS1 hepatocyte receptor region, amino acids 27-35. In this paper, we report the DNA sequence of the gibbon HBV PreS gene. The lack of preS2 mAb (116-34) binding can be explained by a unique nucleotide substitution of A for C in the second codon of the preS2 region leading to the replacement of glutamine with lysine. Two other unique changes were observed at the seventh and 24th amino acid positions in the preS2 gene leading to a substitution of a valine for threonine and alanine, respectively. Unlike all human derived HBV sequences in the preS1 region, the gibbon HBV had a glutamic acid instead of an aspartic acid at amino acid residue 27. Another unique substitution was a leucine for alanine at preS1 position 33. These amino acid changes in the gibbon HBV may explain its unique preS mAb reactivity.
CT Check Tags: Animal; Comparative Study
Amino Acid Sequence
Antibodies, Monoclonal
Base Sequence
Cloning, Molecular
DNA, Viral: GE, genetics
*DNA, Viral: IP, isolation & purification
Genes, Viral
Genome, Viral
Hepatitis B Surface Antigens: BL, blood
*Hepatitis B Virus: GE, genetics
Hepatitis B Virus: IP, isolation & purification
*Hylobates: MI, microbiology
Molecular Sequence Data

Oligodeoxyribonucleotides
Pan troglodytes
Polymerase Chain Reaction
Sequence Homology, Amino Acid

L28 ANSWER 15 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1993:586344 BIOSIS
DN PREV199497005714
TI Modulation of adhesion molecule expression on endothelial cells during the late asthmatic reaction: Role of macrophage-derived **tumour** necrosis factor-alpha.
AU Lassalle, P.; Gosset, P. (1); Delneste, Y.; Tsicopoulos, A.; Capron, A.; Joseph, M.; Tonnel, A. B.
CS (1) CJF No. 90-06, Inst. Pasteur, B.P. 245, 59019-Lille France
SO Clinical and Experimental Immunology, (1993) Vol. 94, No. 1, pp. 105-110.
ISSN: 0009-9104.
DT Article
LA English
AB In a previous work we have demonstrated that in patients exhibiting a late allergic reaction (**LAR**), alveolar macrophages (AM) collected 18 h after bronchial allergen challenge produced high levels of IL-6 and **tumour** necrosis factor-alpha (TNF) which is known to up-regulate the endothelial cell expression of adhesion molecules participating in the development of the inflammatory reaction in bronchial asthma. For these reasons, we evaluated the effect of AM supernatants from asthmatic patients developing an **LAR** on intercellular adhesion molecule-1 (ICAM-1) and endothelial leucocyte adhesion molecule-1 (ELAM-1) expression by human endothelial cells. The expression of adhesion molecules was assessed by an ELISA method and compared with the effect of an optimal dose of human recombinant (hr) TNF. Results showed that AM supernatants, from challenged asthmatics developing an **LAR**, increased significantly the ICAM-1 and ELAM-1 expression on endothelial cells to a level similar to that obtained in the presence of hrTNF (500 U/ml) (P lt 0.001 in both cases, respectively 90.4% and 75.2% of the level obtained with hrTNF). In contrast, AM supernatants from asthmatics at baseline or exhibiting, after challenge, a single early reaction had no significant effect on these parameters (P=NS in both cases, respectively 23.5% and 24.7% of the ICAM-1 expression, 22-7% and 15.3% of the ELAM-1 expression obtained with hrTNF). AM-derived TNF present in these supernatants was thought to play a key role in endothelial cell stimulation, since: (i) TNF = concentration in AM supernatants correlated with its effect on ICAM-1 (r 0.80, p lt 10-4) and ELAM-1 expression (r=0.88, p lt 10-5); and (ii) a neutralizing anti-TNF **antibody** decreased their effect (68% and 80% respectively on ICAM-1 and ELAM-1 expression). Moreover, the role of IL-6 was excluded on the basis both of the hrIL-6 in efficiency to induce ICAM-1 and ELAM-1 synthesis, even in costimulation with hrTNF, and of anti-IL-6 **antibody** to neutralize the effect of AM supernatants. Our results suggest that, beside mast cells and lymphocytes, macrophages might participate in the induction of the local inflammatory reaction observed in bronchial asthma. During the **LAR**, cytokines and

especially TNF are able, through an enhanced adhesion molecule expression on endothelial cells, to facilitate the bronchial cellular influx.

IT Major Concepts
Allergy (Clinical Immunology, Human Medicine, Medical Sciences); Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport and Circulation); Cardiovascular System (Transport and Circulation); Clinical Immunology (Human Medicine, Medical Sciences); Endocrine System (Chemical Coordination and Homeostasis); Metabolism; Pathology; Pulmonary Medicine (Human Medicine, Medical Sciences)

IT Miscellaneous Descriptors
CYTOKINE-FACILITATED BRONCHIAL CELLULAR INFLUX; ENDOTHELIAL **LEUKOCYTE** ADHESION MOLECULE-1; INTERCELLULAR ADHESION MOLECULE-1; INTERLEUKIN-6; LOCAL INFLAMMATORY REACTION INDUCTION; LYMPHOCYTE; MAST CELL; NEUTRALIZING **ANTIBODY**; **TUMOR** NECROSIS FACTOR-ALPHA

ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGN Organism Name
human (Hominidae)

ORGN Organism Superterms
animals; chordates; humans; mammals; primates; vertebrates

IT Major Concepts
Allergy (Clinical Immunology, Human Medicine, Medical Sciences); Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport and Circulation); Cardiovascular System (Transport and Circulation); Clinical Immunology (Human Medicine, Medical Sciences); Endocrine System (Chemical Coordination and Homeostasis); Metabolism; Pathology; Pulmonary Medicine (Human Medicine, Medical Sciences)

L28 ANSWER 16 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 2
AN 1990:176634 BIOSIS
DN BA89:93804
TI T LYMPHOCYTES AND EOSINOPHILS IN ALLERGEN-INDUCED LATE-PHASE ASTHMATIC REACTIONS IN THE GUINEA-PIG.
AU FREW A J; MOQBEL R; AZZAWI M; HARTNELL A; BARKANS J; JEFFREY P K; KAY A B;
SCHEPER R J; VARLEY J; ET AL
CS DEP. ALLERGY AND CLINICAL IMMUNOL., NATL. HEART AND LUNG INST., DOVEHOUSE ST., LONDON SW3 6LY, UK.
SO AM REV RESPIR DIS, (1990) 141 (2), 407-413.
CODEN: ARDSBL. ISSN: 0003-0805.
FS BA; OLD
LA English
AB The kinetics and phenotype of T lymphocytes infiltrating the airways of guinea pigs undergoing late-phase asthmatic reactions (**LAR**) were studied with **monoclonal antibodies**, cytofluorimetry, and immunocytochemistry. Challenge of sensitized animals with aerosolized ovalbumin was followed by early (2 h) and late-phase (17 h) bronchoconstriction. The induction of hypersensitivity, by aerosolized antigen, was associated with an increase in mucosal T cell numbers, which consisted almost entirely of CD8+ T cells. Following allergen challenge of fully sensitized animals, a biphasic rise in total T cell (CD3+) numbers was observed in the bronchial mucosa, peaking at 17 and 48 h. A similar pattern of T cell accumulation was observed in the bronchial adventitia but with an extra early peak at 2 h. In contrast to the T cell influx of the sensitization phase, the postchallenge infiltrate consisted largely of CD3+,CD8- cells. Eosinophil numbers were elevated in both

submucosa and adventitia, with a single broad peak between 17 and 48 h. T cell infiltration was compared with eosinophil accumulation: while correlations between T cell and eosinophil numbers varied over the 96 h of the experiment, strong associations were observed between CD8+ numbers and eosinophils in the adventitia at 6 h ($r = 0.733$, $p < 0.01$) and between CD3+ numbers and eosinophils in the submucosa at 72 h ($r = 0.88$, $p < 0.001$). No significant changes were detected in T cell or eosinophil numbers in the lung parenchyma. There was a postchallenge increase in eosinophils (but not T cells) in bronchoalveolar lavage (BAL). In contrast, analysis of blood **leukocytes** showed no changes in T cell total or subset numbers during the progression of the **LAR**. These results indicate that accumulation of T cells in the airways is a feature of the **LAR** in this model. These observations are consistent with human BAL and skin studies of the allergen-induced late-phase reaction. These data also illustrate that evaluation of distant compartments (blood and BAL) may not fully reflect rapidly evolving tissue infiltration in the bronchial mucosa.

IT Miscellaneous Descriptors
BRONCHOCONSTRICTION ALLERGIC TISSUE REACTION

L28 ANSWER 17 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 3
AN 1988:441321 BIOSIS
DN BA86:93419
TI CO-EXPRESSION OF MAC-1 AND P150 95 ON CD5-POSITIVE B CELLS STRUCTURAL AND FUNCTIONAL CHARACTERIZATION IN A HUMAN CHRONIC LYMPHOCYTIC LEUKEMIA.
AU DE LA HERA A; ALVAREZ-MON M; SANCHEZ-MADRID F; MARTINEZ-A C; DURANTEZ A
CS BASEL INST. IMMUNOL., GRENZACHERSTR. 487, CH-4005 BSAEL, SWITZ.
SO EUR J IMMUNOL, (1988) 18 (7), 1131-1134.
CODEN: EJIMAF. ISSN: 0014-2980.
FS BA; OLD
LA English
AB The **leukocyte** adhesion receptors (**LAR**) Mac-1 and p150,95 were thought to occur only on myeloid cells, but recently, mouse Ly-1+ (CD5+) B and pro-B cells were shown to bind M1/70 **monoclonal antibody**, an anti-Mac-1 **antibody**. Using immunoprecipitation, sodium dodecyl sulfate gel electrophoresis, immunofluorescence and flow cytometry, we have studied the expression of **LAR** in human CD5+ B cells from chronic lymphocytic leukemia (B-CLL) patients. 170,95 kDa Mac-1 and p150,95, as well as 180,95 kDa LFA-1 heterodimers are shown to be co-expressed on CD5+ .mu.+ .vkappa.+ B cells from a patient where they retain their known function in homotypic cell-cell adhesion. Therefore, functional Mac-1 and p150,95 **LAR** are not restricted to myeloid cells.

IT Miscellaneous Descriptors
MONOCLONAL ANTIBODY LEUKOCYTE RECEPTORS

L28 ANSWER 18 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1977:114655 BIOSIS
DN BA63:9519
TI SEARCH FOR ANTIGENS AND ANTIBODIES CROSS REACTIVE WITH TYPE C VIRUSES OF THE WOOLLY MONKEY AND GIBBON APE IN ANIMAL MODELS AND IN HUMANS.
AU STEPHENSON J R; AARONSON S A
SO PROC NATL ACAD SCI U S A, (1976) 73 (5), 1725-1729.
CODEN: PNASA6. ISSN: 0027-8424.

FS BA; OLD
LA Unavailable
AB Several reports indicated the presence of type-C viral antigens in human **tumors** and viruses closely related to those of the woolly monkey and gibbon ape in cultured human cells. Attempts to detect woolly monkey viral antigens in human tissues, or **antibodies** directed against structural polypeptides of woolly monkey viruses in human sera were unsuccessful [in the present study]. It was possible to demonstrate viral antigens in tissues and **antibodies** reactive to viral components in several animal [cat (Felis catus)] and primate [baboon (Papio cyanocephalus), rhesus monkey (Macaca mulatta), gibbon ape (Hylobates **lar**)] model systems. Further evidence against the presence of woolly monkey viruses in human is the failure to identify spontaneous or chemically induced viruses of this group in > 200 individual cultures of human origin examined. These findings argue against the likelihood that viruses closely related to the woolly monkey virus are associated with human **tumors** or are common infectious agents of man.
IT Miscellaneous Descriptors
FELIS-CATUS PAPIO-CYNOCEPHALUS MACACA-MULATTA HYLOBATES-LAR WOOLLY MONKEY VIRUS ONCORNAVIRUS

L28 ANSWER 19 OF 19 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1973:161932 BIOSIS
DN BA55:61925
TI ESTABLISHMENT OF CONTINUOUS LYMPHO BLAST CULTURES FROM **LEUKOCYTES** OF GIBBONS HYLOBATES-**LAR**.
AU WERNER J; HENLE G; PINTO C A; HAFF R F; HENLE W
SO INT J CANCER, (1972) 10 (3), 557-567.
CODEN: IJCNAW. ISSN: 0020-7136.
FS BA; OLD
LA Unavailable
IT Miscellaneous Descriptors
HUMAN EPSTEIN BARR VIRUS CARCINOGENESIS BURKITTS **TUMOR** **ANTIBODY** PRODUCTION